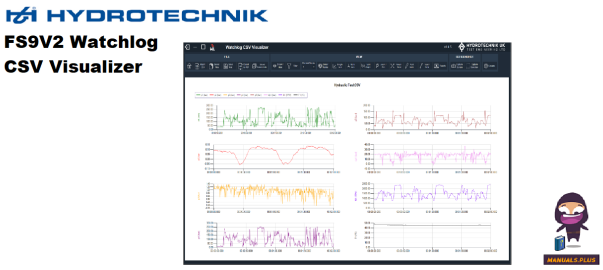

HYDROTECHNIK FS9V2 Watchlog CSV Visualizer User Manual

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HYDROTECHNIK

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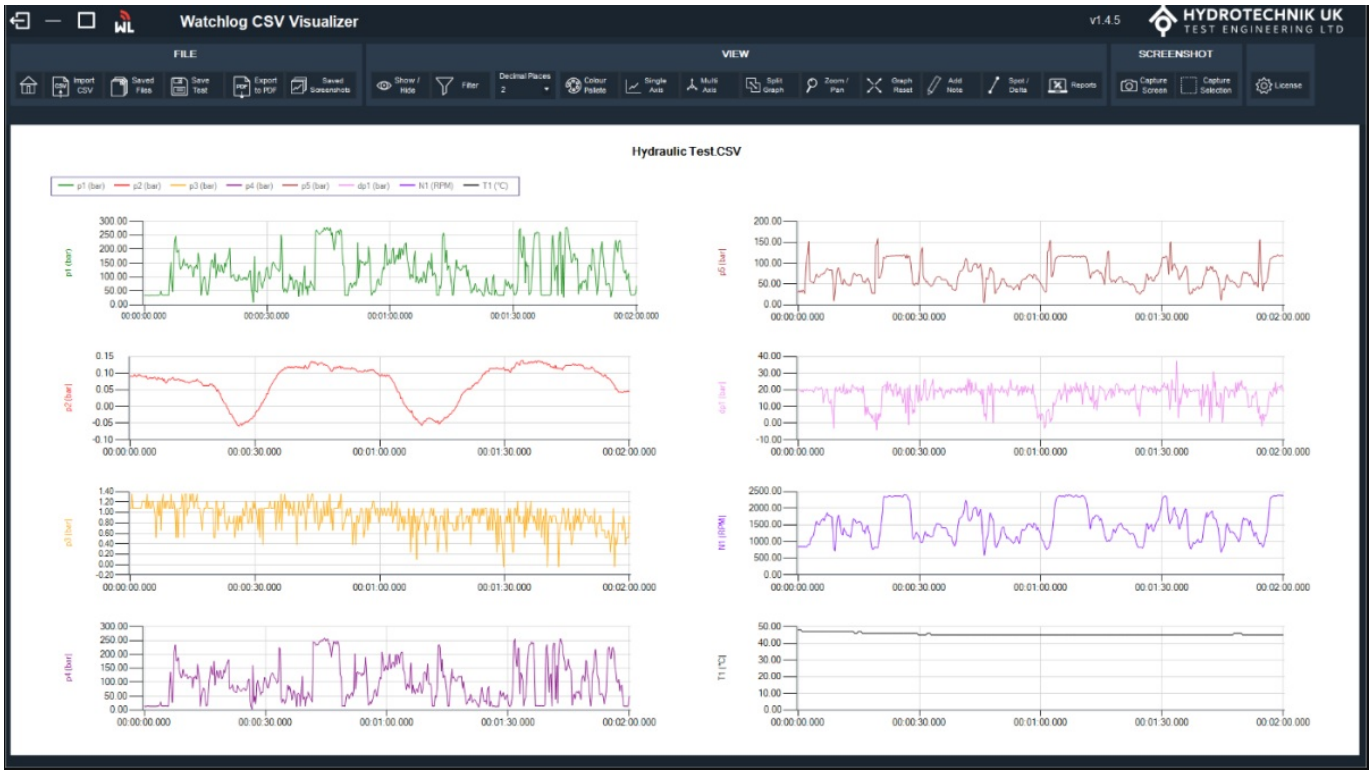


Specifications

- **Supported OS**: Microsoft Windows 7 or higher
- **CPU:** Intel or AMD dual-core processor
- **Memory:** 2 GB RAM
- **Connector:** USB-A 2.0
- **Hard disk space**: 60 MB storage space for software installation
- **Display Resolution:** 1280 x 800

Minimum PC Requirements

Specification	Detail
Supported OS	Microsoft Windows 7 or higher
CPU	Intel or AMD dual-core processor
Memory	2 GB RAM
Connector	USB-A 2.0
Hard disk space	60 MB storage space for software installation
Display Resolution	1280 x 800

Prerequisites

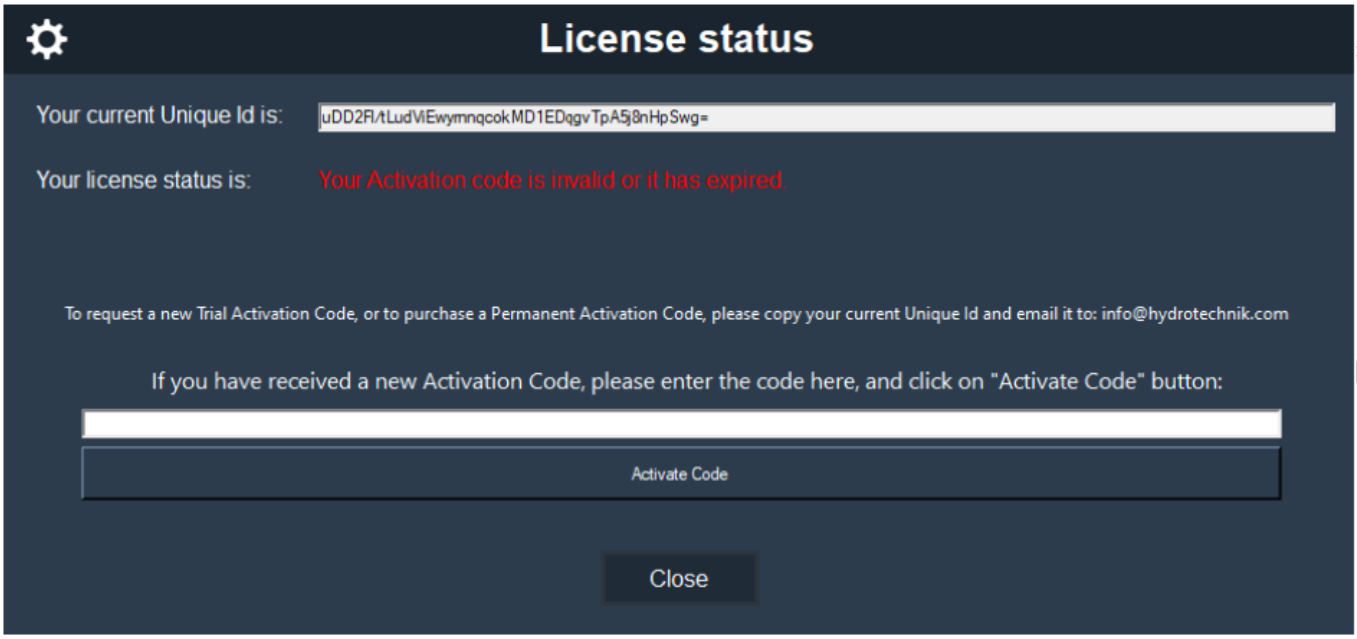
- NET Framework 4.6.2 or higher
- The latest version of Microsoft Edge

Watchdog CSV Visualizer Software Installation

Run the “Install” file with the new software installer version in the same folder. Then follow the onscreen instructions to complete installation. Following completion, a reboot isn’t necessary.

Opening the App
The software can be run from either the desktop icon or the Start Menu.
For quickly locating the app shortcut press the Windows button and begin typing “CSV Visualiser”.

Registering Licensing Details
When the software is first run, the licensing status window will appear. This window contains a unique code relevant to your machine, which is used to generate an activation code.



Please email your unique ID code to **support@hydrotechnik.co.uk** where an activation code can be provided. Note that an activation code must be used on the same machine from which the unique ID was generated. For licenses, please contact **support@hydrotechnik.co.uk**.

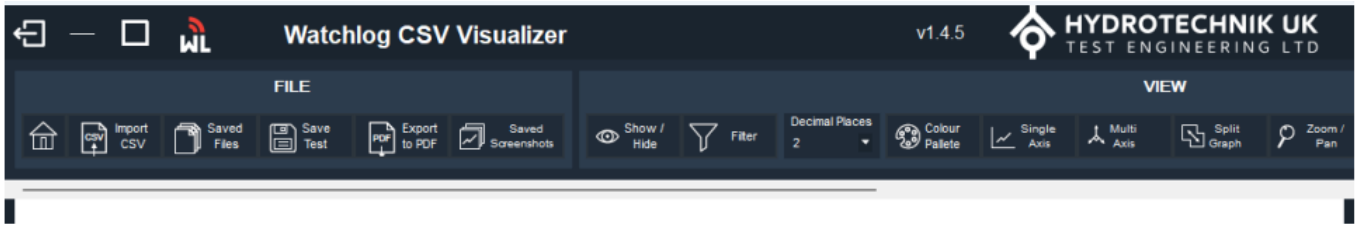
Main Screen Layout

1. **Exit –** Closes the application.
2. **Minimise –** Hides the application to the taskbar.
3. **Restore Down/Maximise** – Changes the application from full screen to window mode.
4. **Home –** Shows the application’s main screen, which displays the charts when a CSV file is loaded.

5. **Import CSV** – Click to import a CSV file stored on the PC.
6. **Saved Files** – This shows a historical list of previous CSV files loaded and saved within the application.
7. **Save a test –** name it and store it in the correct asset folder Export to PDF
8. **Saved screenshots –** ready for adding to reports (see 21)
9. **Show/hide** – this pops up a box to select which lines of data to display, you can also change the color of the line here as well
10. **Filter –** Charts with many data points or noise can be smoothed using the filter feature. The filter can also be reset from here.
11. **Decimal Places –** Select the number of decimal places data is shown to, ranging from 0 to 4.
12. **Colour Palate –** Choose the color of the background and graph lines.
13. **Single Axis** – All data will be shown on a single chart with a single axis.
14. **Multiple Axis –** All data will be shown on a single chart with multiple axes.
15. **Split –** Show data in multiple charts based on the predefined group name when using the CSV import feature.
16. **Zoom Pan –** Switch between zooming and panning a chart when clicking and dragging.
17. **Graph reset-** resets to the original screen, e.g. after zooming in
18. Add a note to the test and move to an ideal position
19. **Spot/Delta** – add a series of spot lines (select the channels you wish to view), move the line, and the actual readings change in the box.
    Delta: adds a box with the readings between 2 points, these points can be manually moved
20. **Reports –** Use standard report templates or choose your own, drag and drop saved tests as well as images captured to create reports capture screenshots, add to the library of images
21. **Capture selection:** Capture just a portion of a test rather than the entire screenshot.
22. **License Status**: When clicked, the license status window will open, showing the PC's unique ID, license code, and remaining days the license is valid.

Screen resolution

Please note that on smaller screens, such as on some laptops, you may find a horizontal scrollbar on the toolbar as the example below demonstrates.

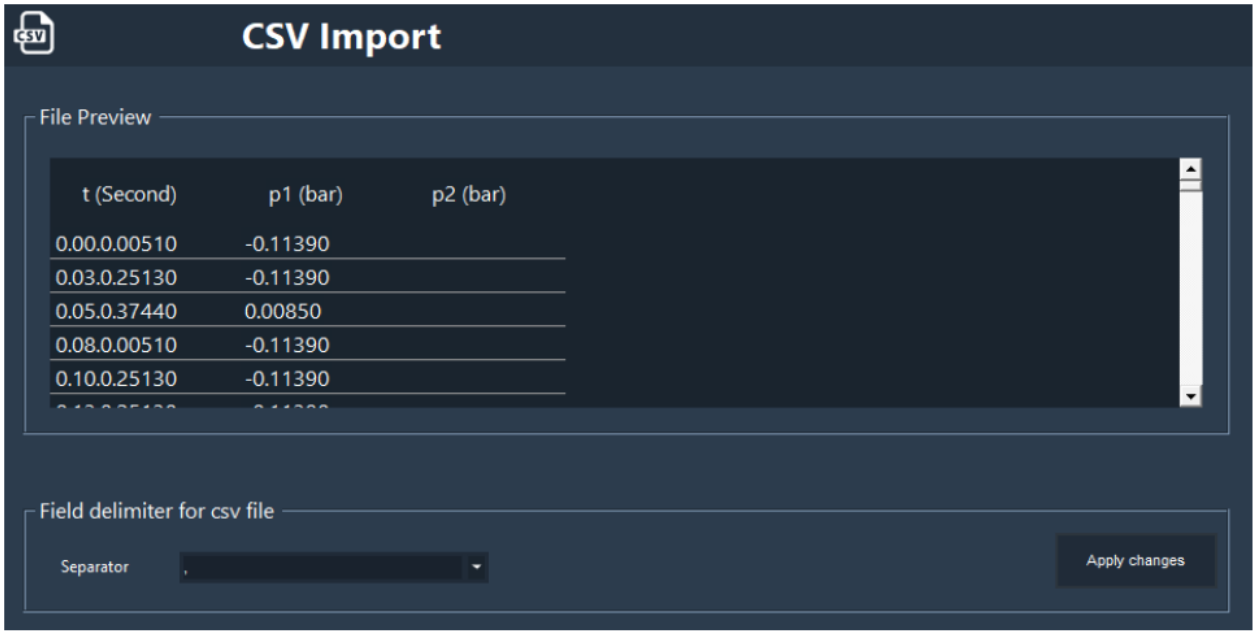


Please use your screen display settings to select a minimum screen resolution of 1920×1080, which bring all icons into view, removing the scrollbar. Note: we aim to remove this requirement in future versions allowing all toolbar buttons to be visible on smaller screens with no scrollbar.

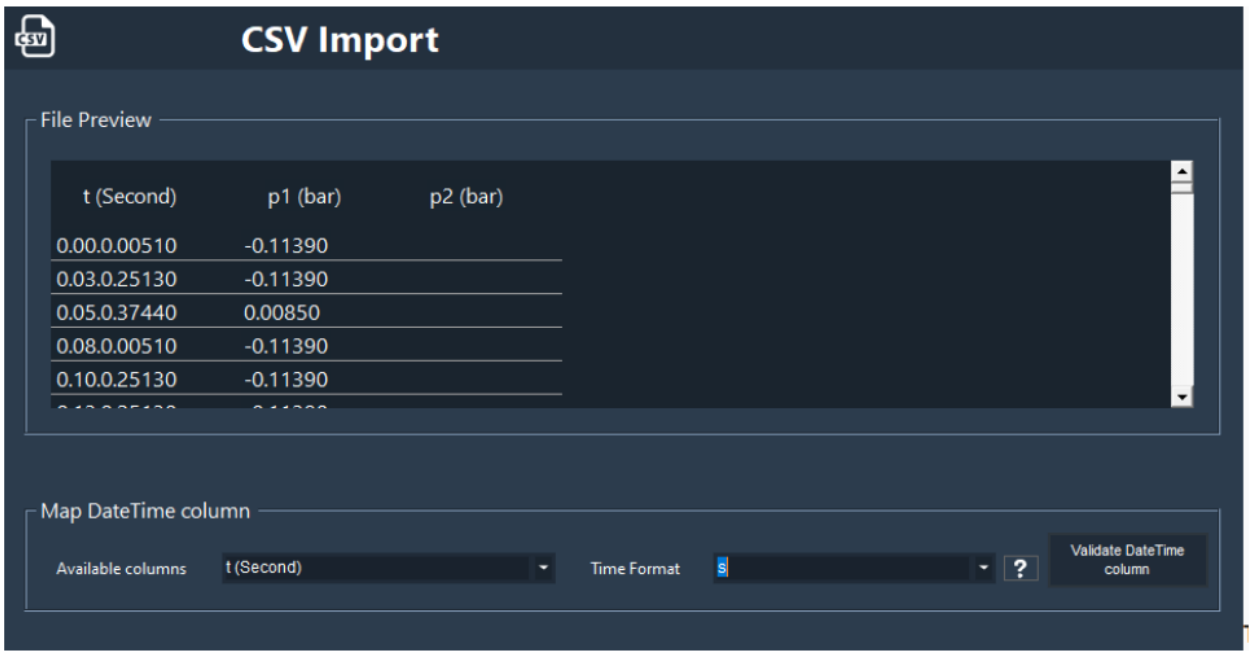
Import a CSV File
A CSV file can be imported in two different ways:

- Try opening the file, if the time and data format is recognised by the software the file will open automatically
- If the file type is not recognised the data needs mapping:

- Choose the type of csv file (comma, semicolon or tab separated, for example) and then click ‘apply changes’ to see if it’s recognised



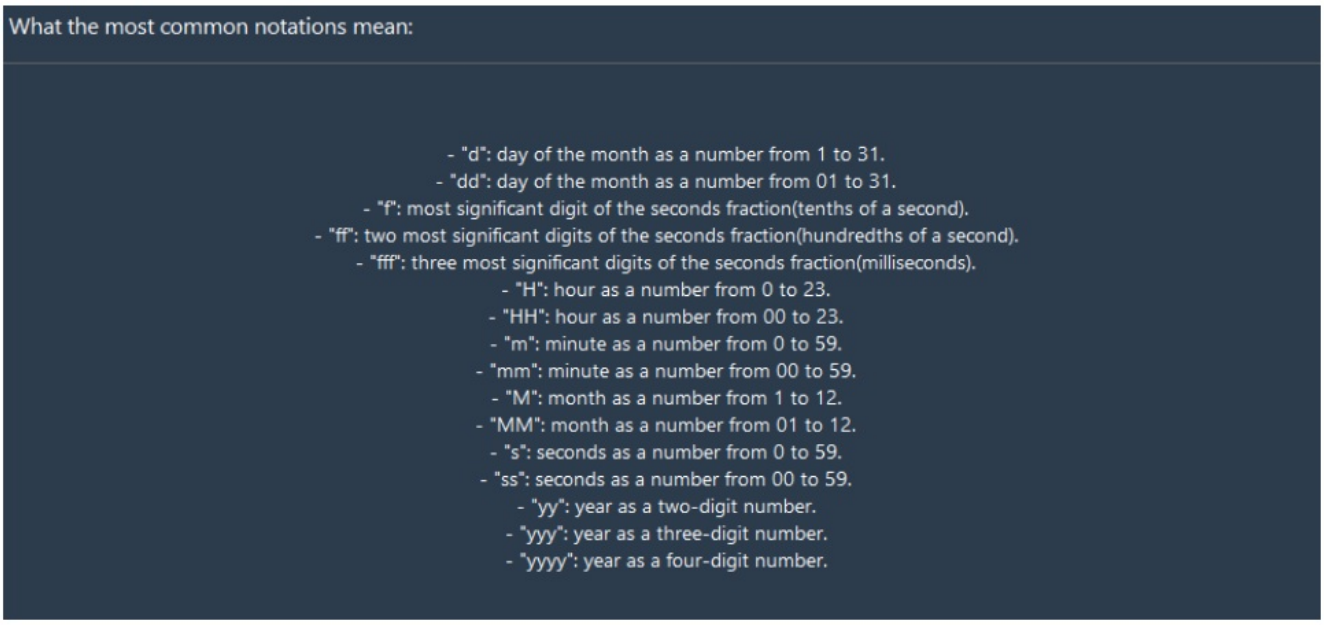
- Next, select the time format, eg. S for seconds or one of the pre-formatted time options.



Import Options
Once all data has been correctly formatted for import, click the “Ok” button to display the data graphically.

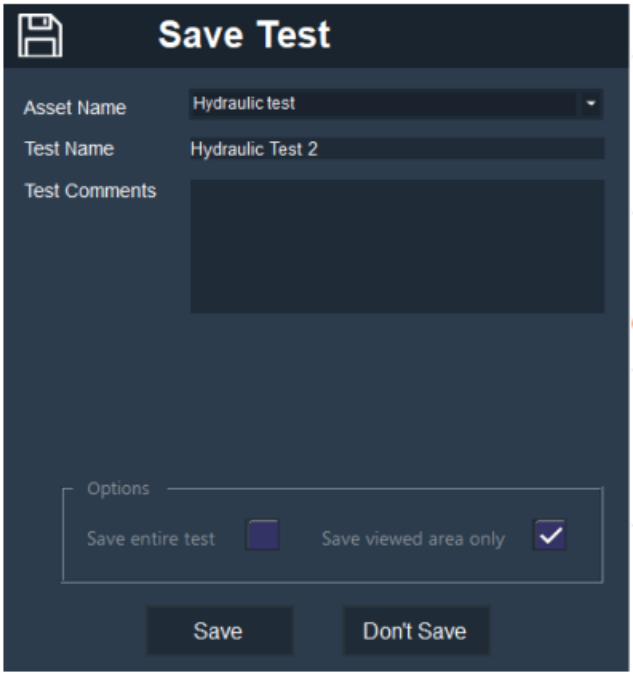
Common Import Problems

- **Blanks in data** – Ensure each column of the CSV file is populated, if it is not populated, remove it from the CSV file.
- **Columns without headings—**Ensure each column in the CSV file has a heading for its contents. If not, the software doesn’t know what each value represents.
- **Incorrect Time formatting—**Ensure each column in the CSV file has a heading for its contents. If not, the software doesn’t know what each value represents.
  Here is a list of the most common time formats recognised by the software:



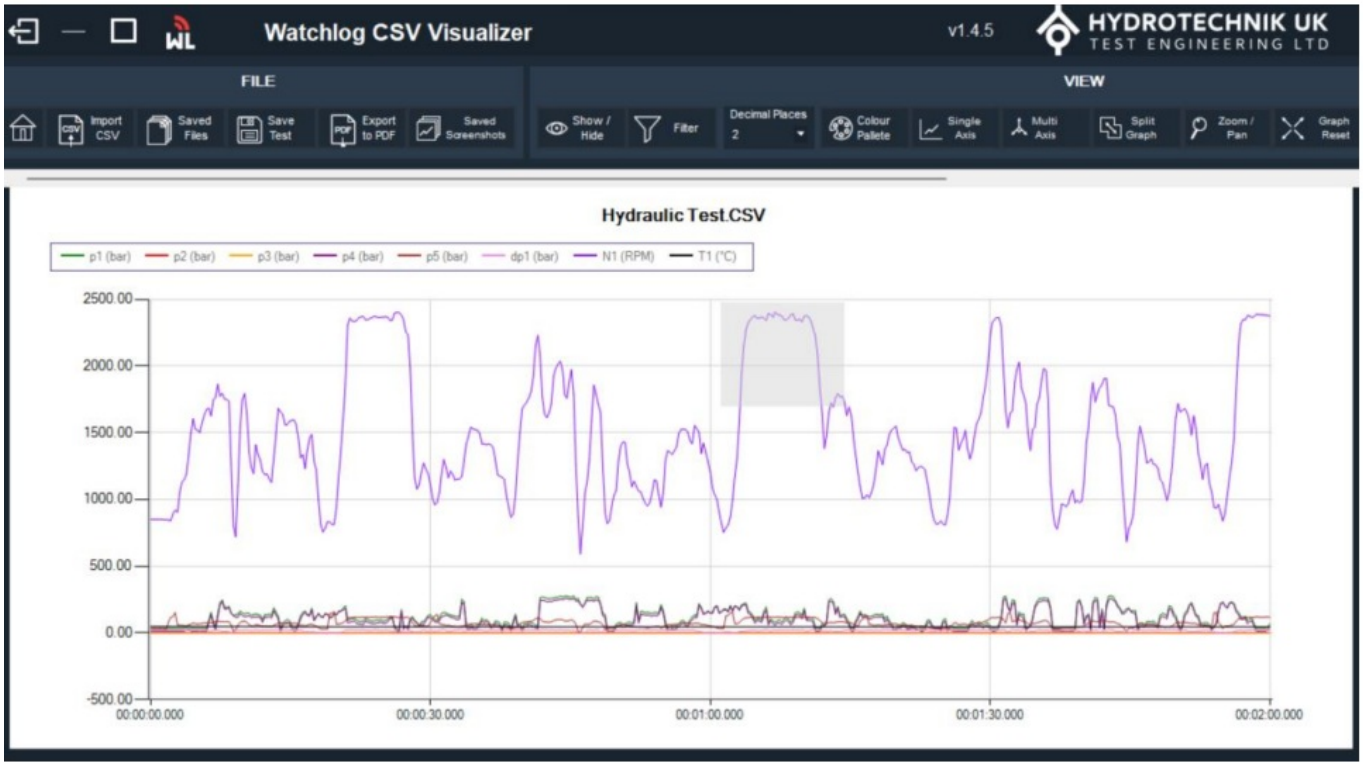
Saving a Test

After importing a file it is prudent to save a test. When saving a test, the file is added to the software for easy retrieval later. The full test can be saved, or just a zoomed area to highlight a certain part of a test for a report, for example.

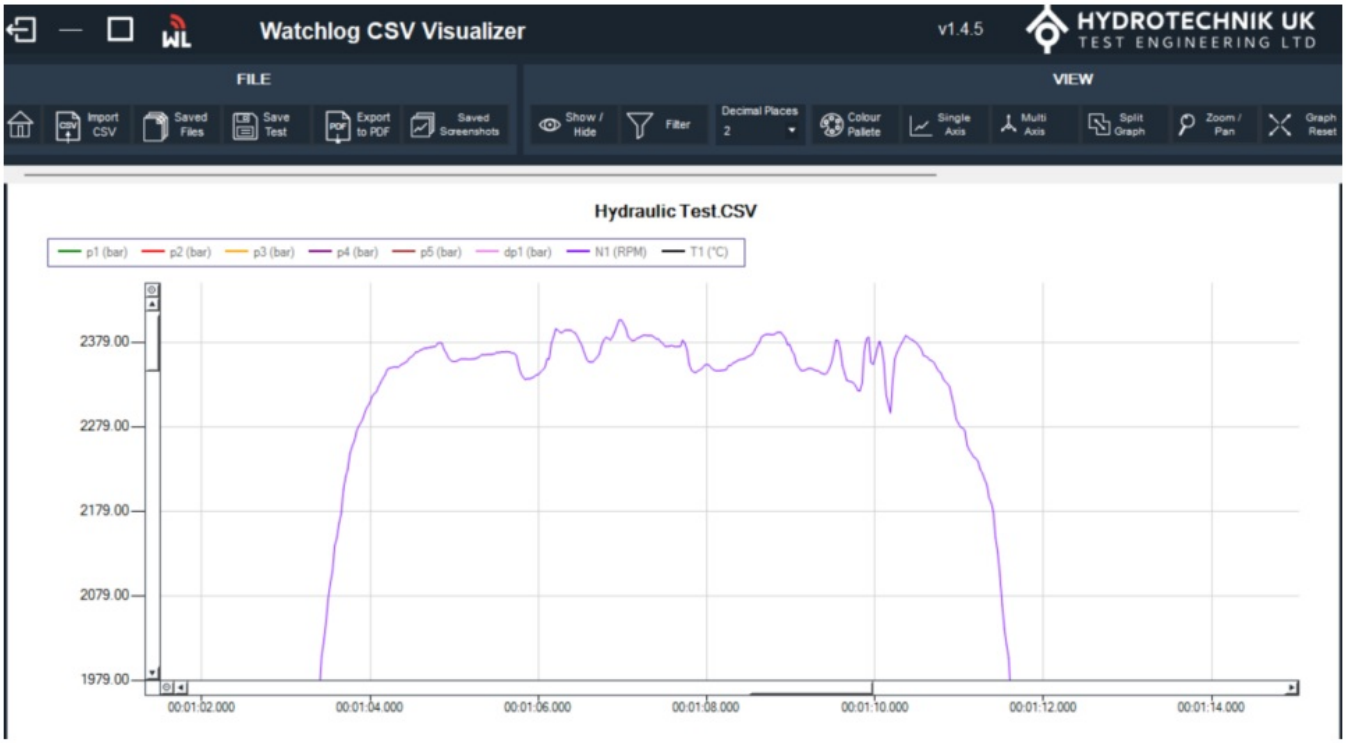


Displaying Graphs

When first importing data all results will show on one graph:

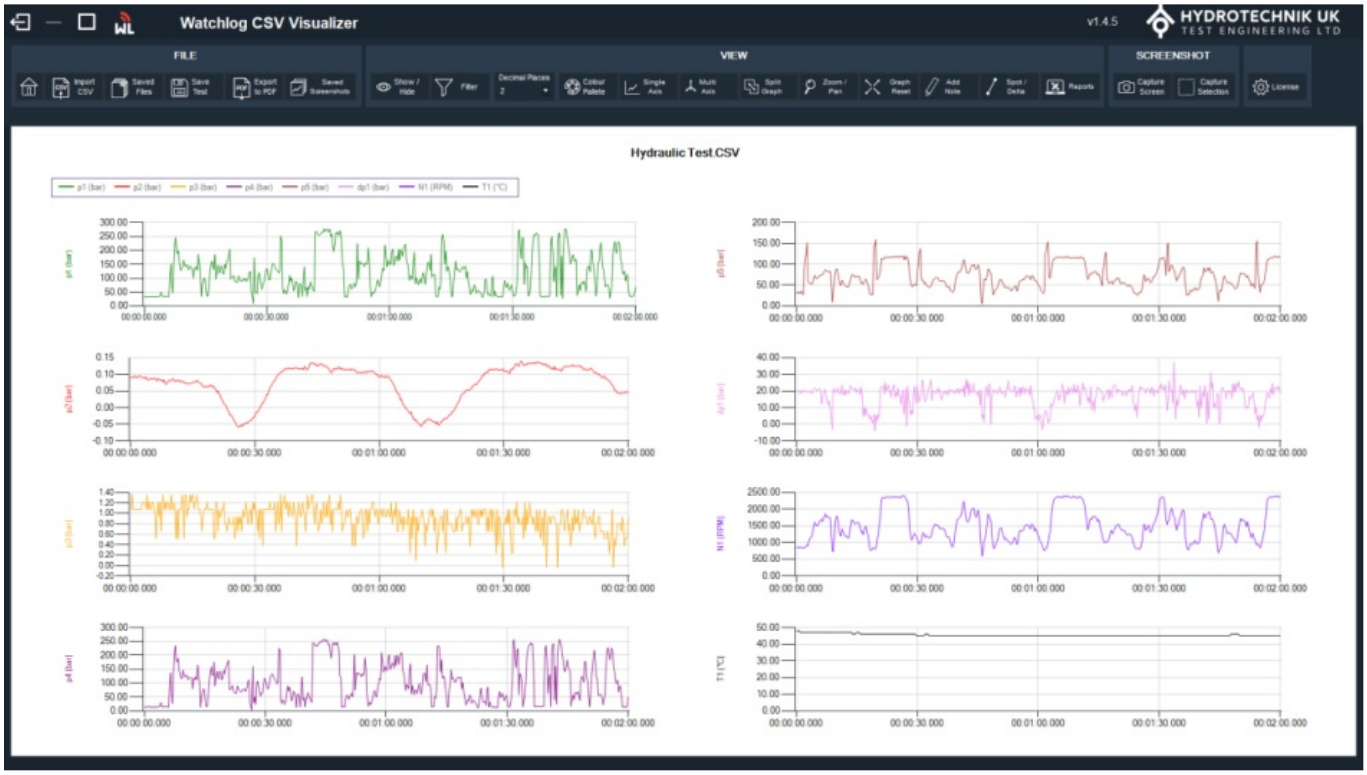


By selecting zoom a specific area can be expanded (see highlighted area above:

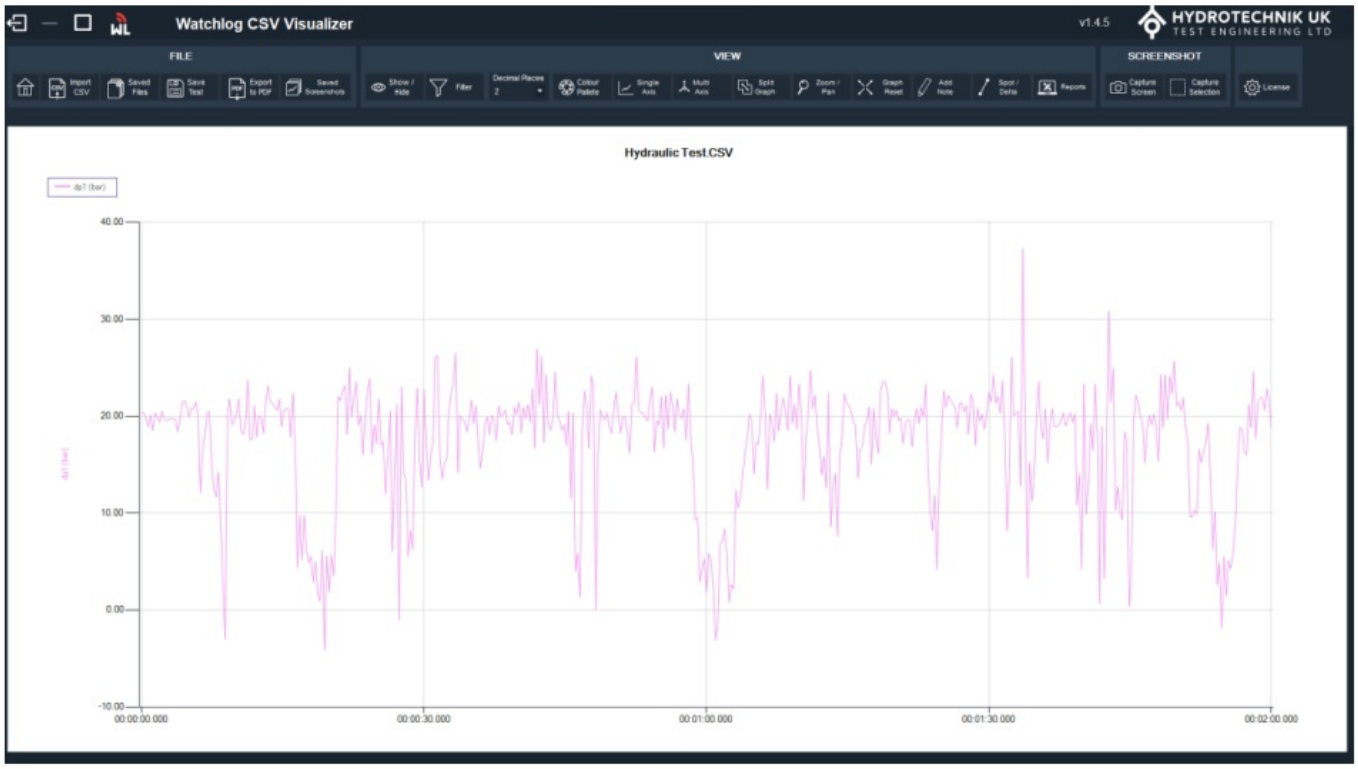


Splitting data into multiple graphs

When first importing data, everything will be shown on a single chart with one axis. By clicking the “Split” button, data will be separated out into multiple graphs. Clicking one of these



To view the channel individually, double-click on one of the channels.



Zooming/Panning

By clicking and dragging a chart you can zoom into specific areas. Once the “Zoom” option is selected you will switch from the zoom function to pan. Clicking the button again will then switch back to zoom mode. You can return all charts to their normal size by clicking the expand chart icon. 

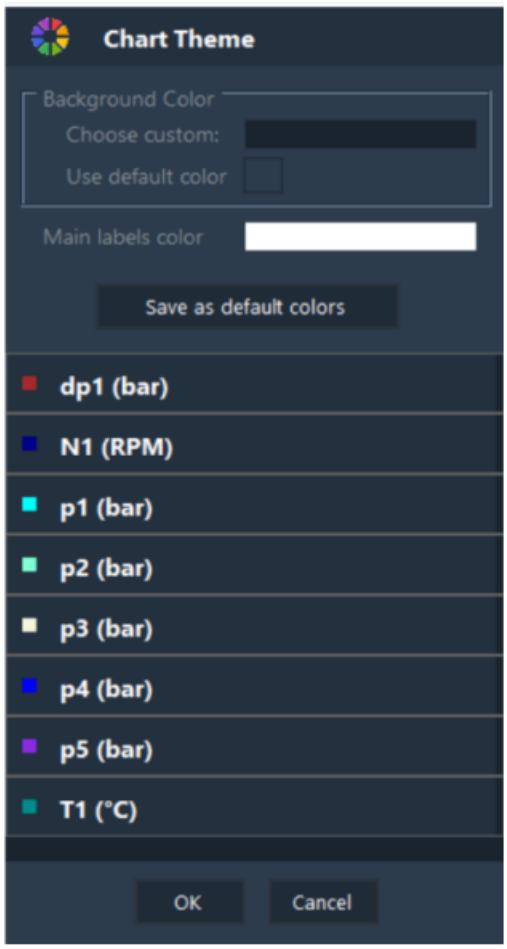
Saving & Viewing Test Files

Once a CSV file has been imported it should be saved. Saved tests are found by clicking the “Test Files” button along the top row, where they can be opened and exported to PDF.

Show/Hide Graph Items
Clicking the “Show/Hide Min/Max” button at the top of the main screen will control displaying the Graph Selection Window. From here chart elements can be switched on and off, line colours edited, and values will automatically update when hovering the cursor over the charts.

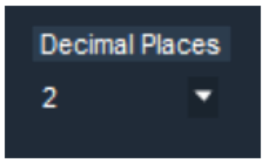
Changing Chart and Line Colours

- Clicking the colour wheel will open a window that allows changing the background colour of the chart, the main colour of the labels, and each of the data categories.
- If you want to save the selected colours so that they are default and the software will load up with these colours pre-set, select “Save as default colours”. Also, if you want to get back to the original default blue colour, select “Use default colour”.

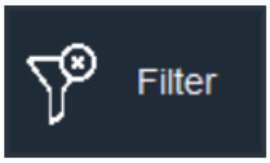


Additional Chart Controls

Decimal Places
Used to round data from 0 to 4 decimal places on all graphs

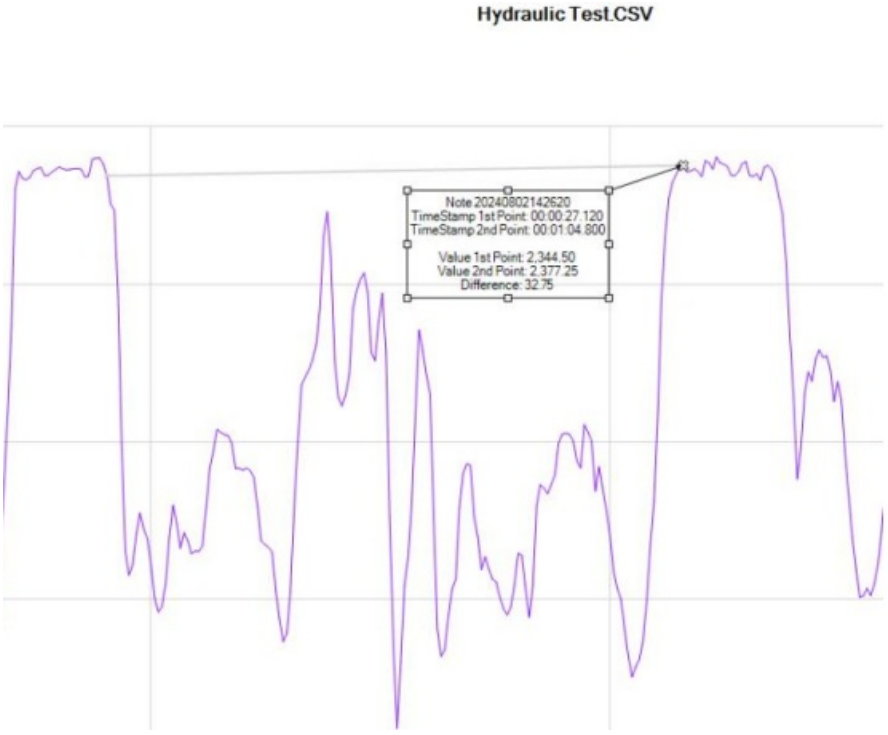


Filter
The “Filter” button will open a small window where a numerical value can be entered to smooth data based on an average number of samples. This is particularly useful when dealing with large volumes of data which may have a lot of noise.



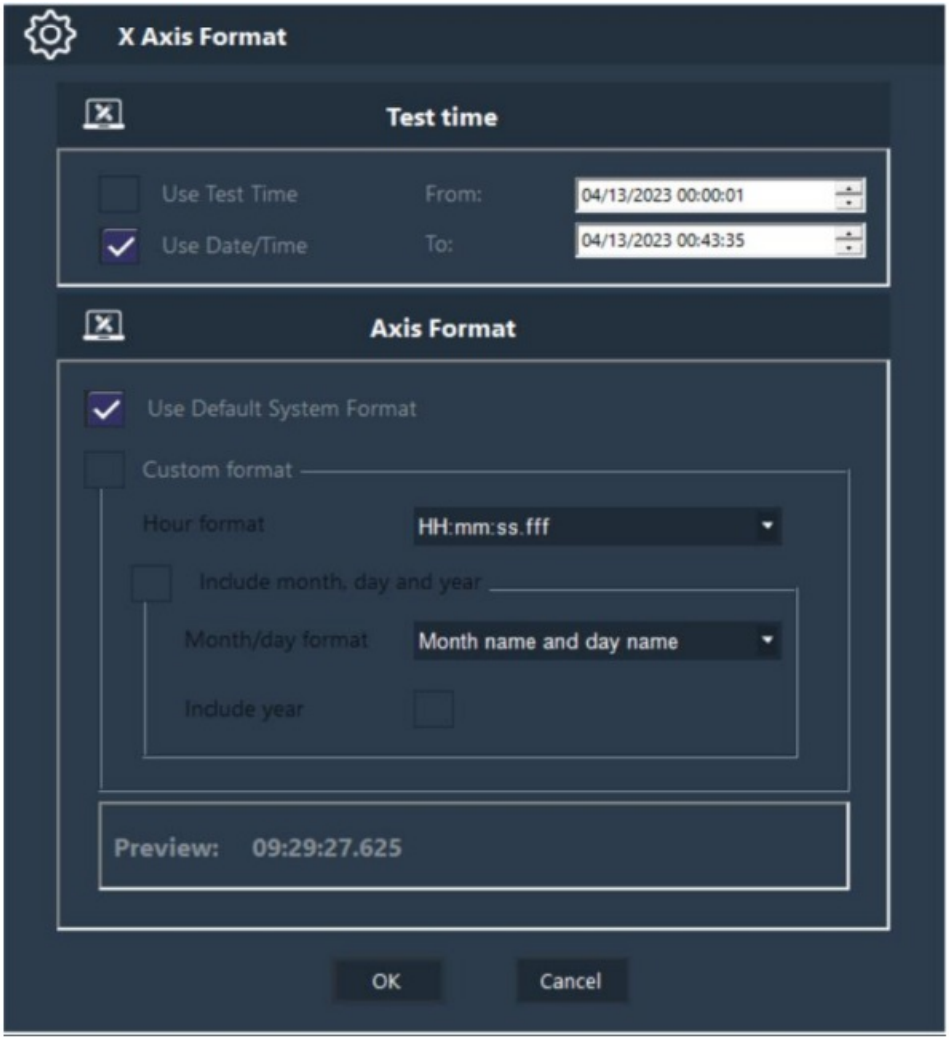
Add a note
By right clicking on the chart, allows you to select to place an annotation, or a point-to-point annotation.
An annotation allows you to point at a datapoint on the chart and write text about it. The annotation can be re-sized, re-coloured as well as the text being re-sized and coloured also.

Delta (Point to Point)
A delta works the same way as an annotation, however, a point-to-point allows the annotation of two points and the difference between them. Using the Delta point-to-point annotation, the points can be dragged along the graph, and the values in the annotation box will change accordingly.



Scaling
To scale the y-axis of the graph, double click on the y-axis, which will bring this menu up.

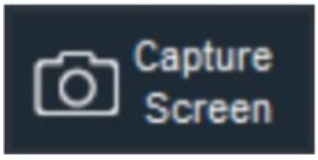
The max and min of the range can then be inputted to adjust the y-axis scale.
To scale the x-axis of the graph, double click on the x-axis, which will bring up this menu.



This menu allows you to toggle between a date/time scaling, and a test-time scaling. This can be used if a test time column was in date/time format, and you wanted to see the x-axis in the test time, it can be toggled at the top by selecting “Use Test Time”. To scale the axis, the time from and to can be input at the top. This will then adjust the scale of the axis to the input timings.

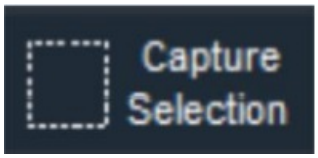
Snapshots/Images

Snapshots of charts, and sections of charts can be snapshotted, and placed into reports. To take a snapshot of the whole chart, select Snapshot.

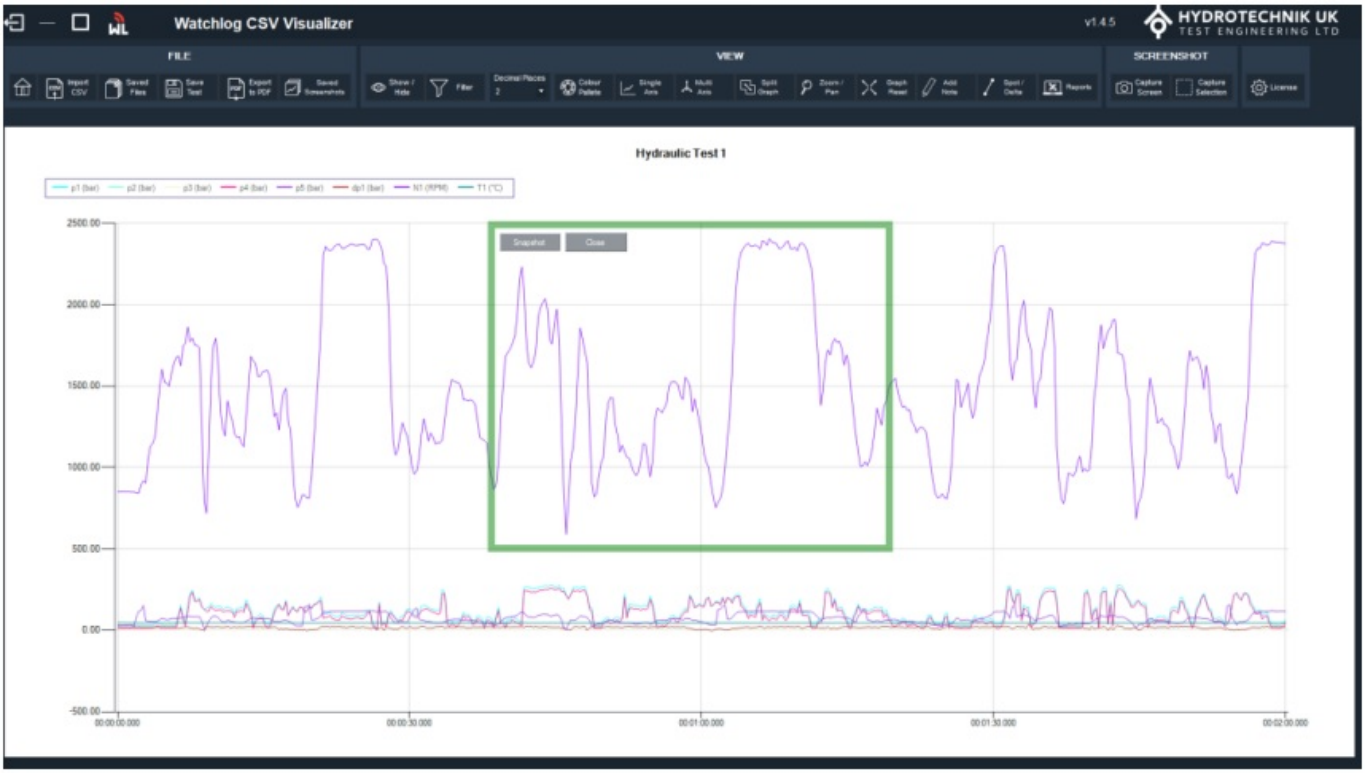


This snapshot can then be saved with a name and assigned to an asset. This snapshot can then be used in the custom reports builder later on.

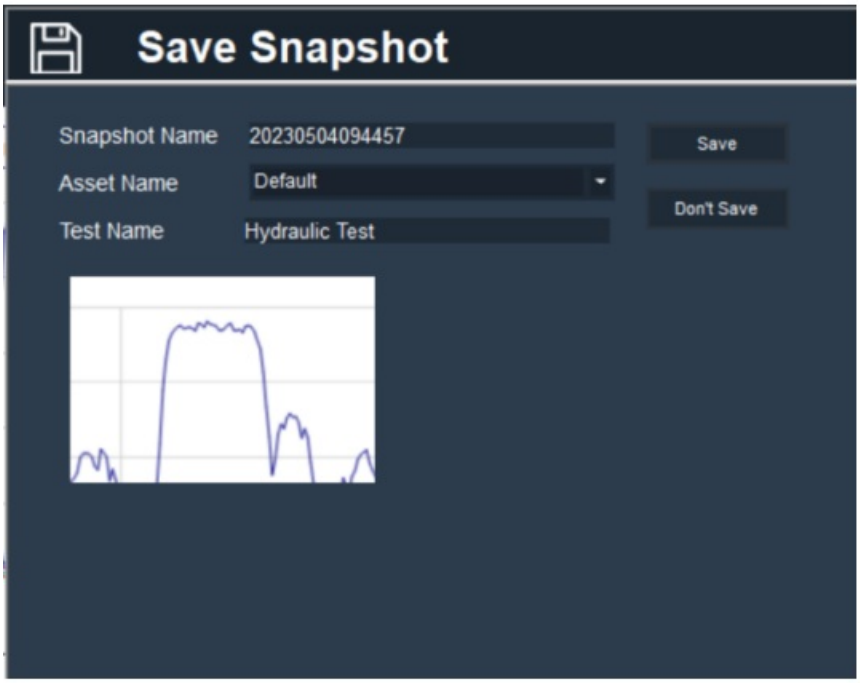
To take a snapshot of a section of the chart, select the image icon.



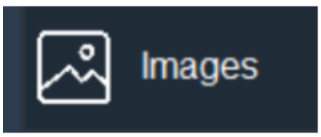
Once selected, a green box will appear. This box can be re-sized and moved to cover the area of interest. The snapshot button can then be selected to take an image of the covered area.



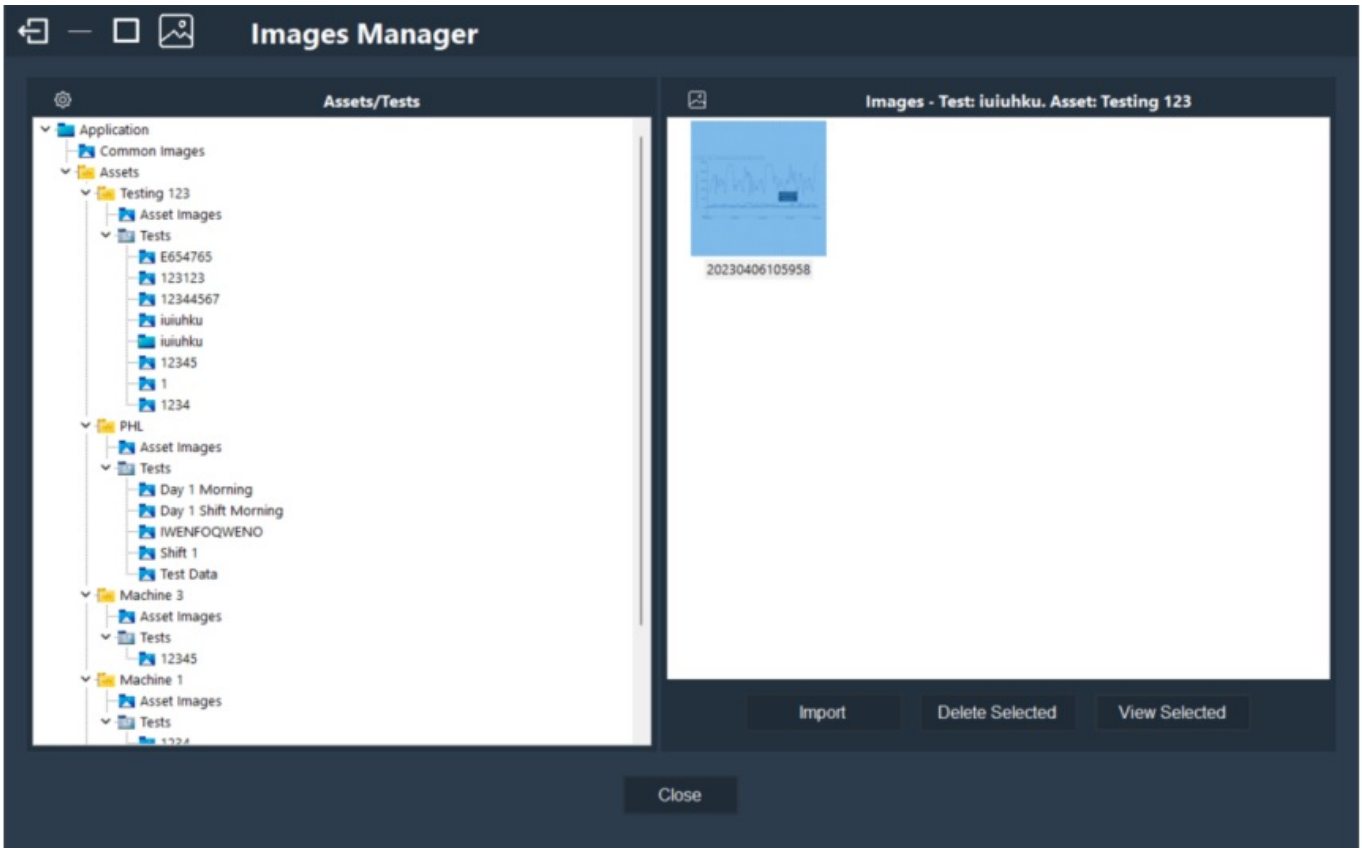
The snapshot can then be saved with a name and assigned to an asset for use in the custom reports builder later.



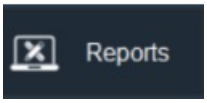
Images captured can then be accessed and viewed in the images section.



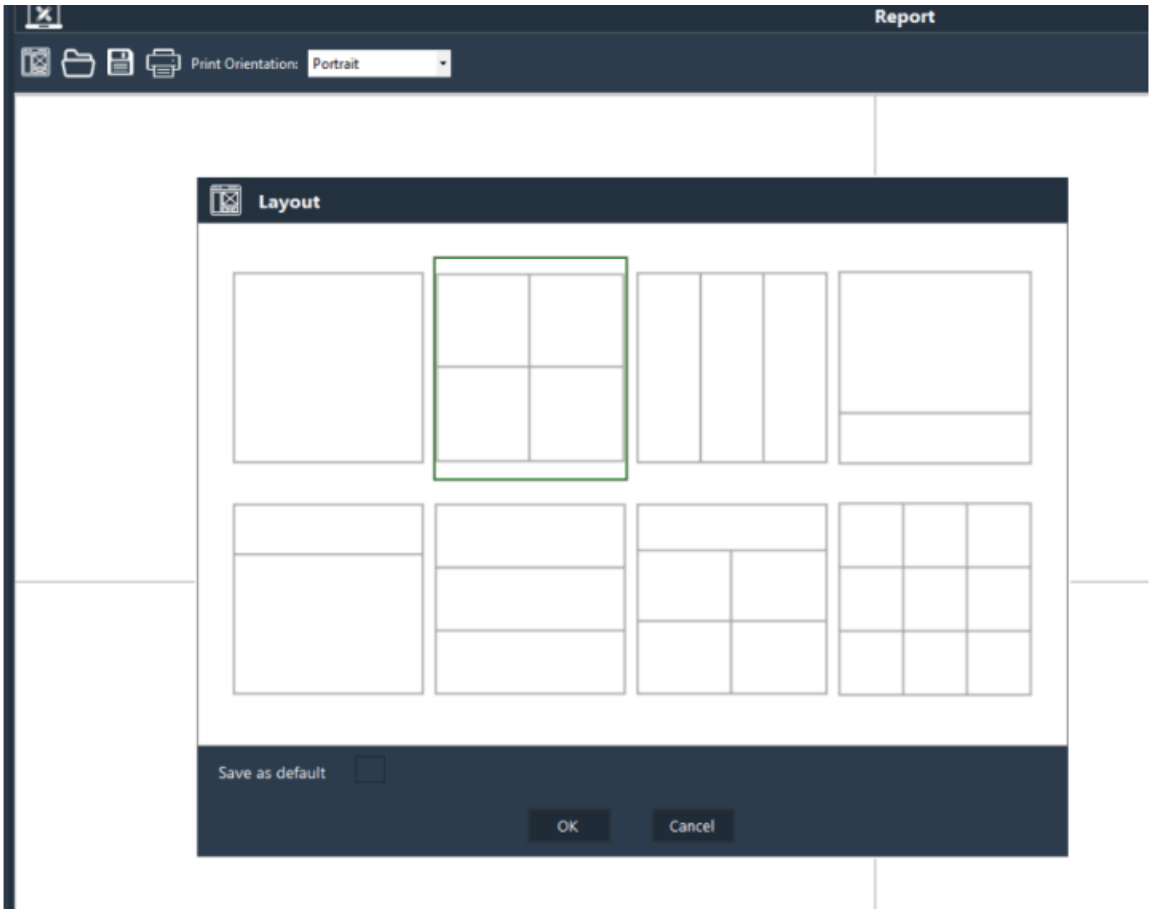
The images can be found in the left column by navigating through the asset names. They can then be viewed by selecting View Selected. Images can also be imported from your PC and then used in the custom report builder.



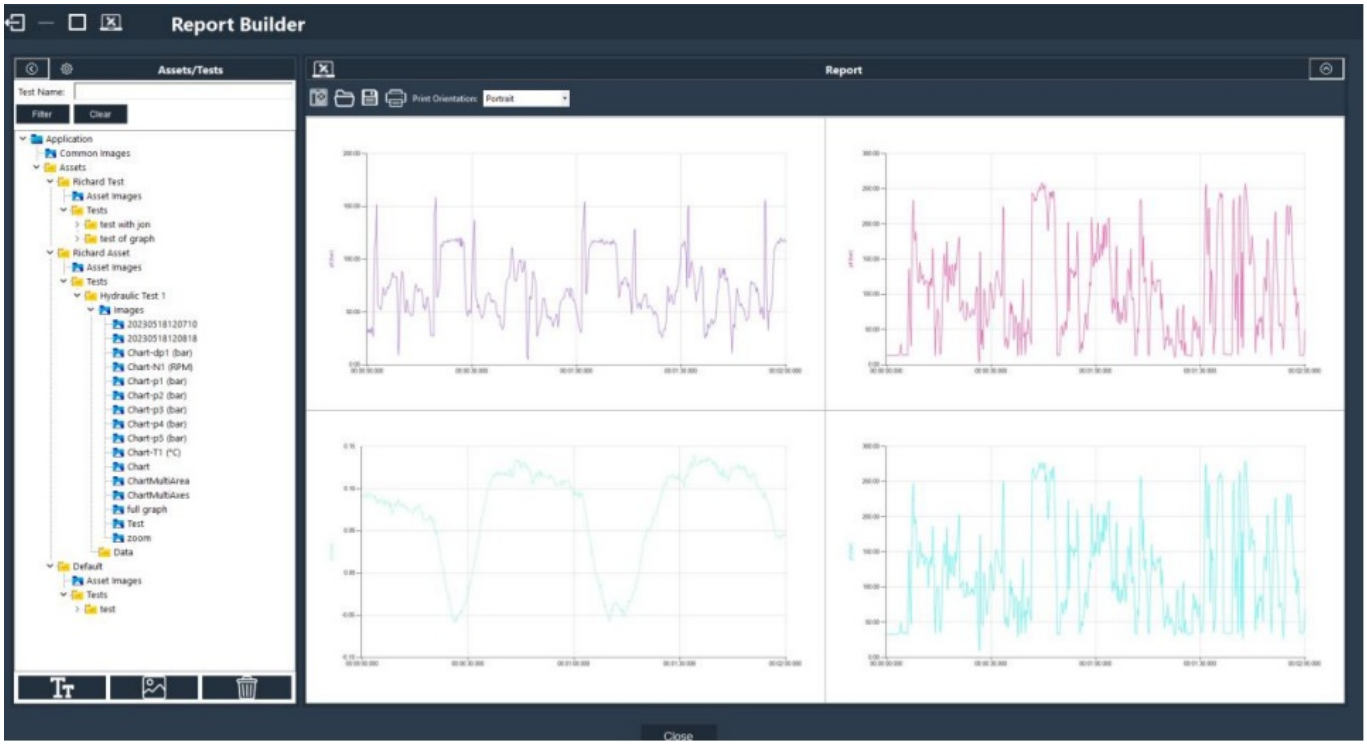
Creating a Report

To access the reports section, select the Reports icon. 

Reports are built via pre-defined layouts. Select the layout best suited to the report you are looking to create, there are 8 options:

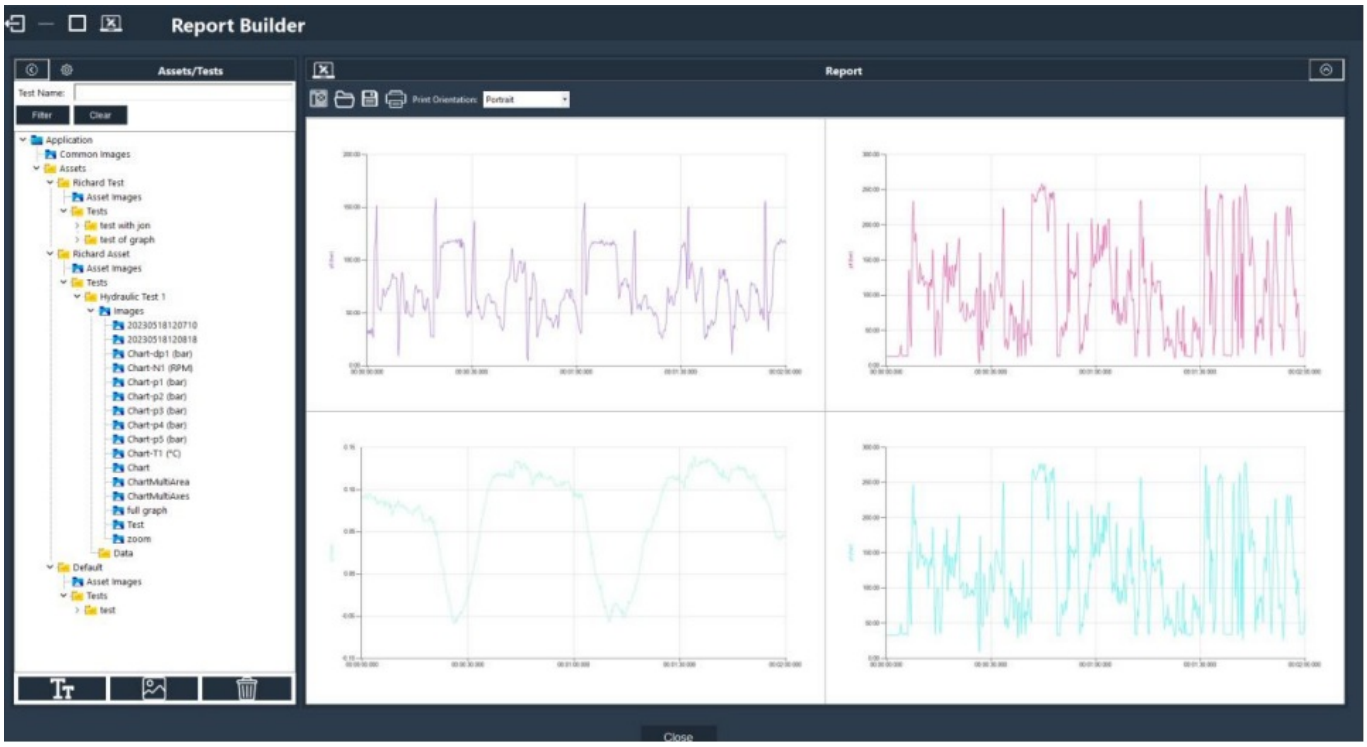


Then drag the test data or images into the required boxes:



Exporting a PDF Report

- The alternative method of creating a report from a pre-set template is to select Export to PDF.
- This creates the following report layout in a landscape format.



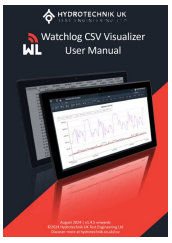
Contact Hydrotechnik to discuss changes to this template if required.

Hydrotechnik UK Test Engineering Ltd
1 Central Park, Lenton Lane, Nottingham, NG7 2NR +44 (0)115 900 3550 | sales@hydrotechnik.co.uk

FAQ

- **Q: How can I change the screen resolution?**
  - A: You can adjust the screen resolution in your computer's display settings. For optimal performance, follow the recommended minimum resolution of 1920×1080.
- **Q: How do I capture a selection of a test?**
  - A: To capture just a portion of a test, use the capture selection feature within the software. This allows you to select and capture specific areas of interest.

Documents / Resources

	HYDROTECHNIK FS9V2 Watchlog CSV Visualizer [pdf] User Manual FS9V2 Watchlog CSV Visualizer, FS9V2, Watchlog CSV Visualizer, CSV Visualizer, Visualizer

References

- **User Manual**