Werusys PI Vision Suite

werusys
INDUSTRIEINFORMATIK

1. PI Vision

PI Vision is a web interface that gives you easy access to your data from the PI system. With the PI System, you move from complex to simple, from plant and process insights to operational intelligence. The PI System's highly scalable, open data infrastructure provides organisations with real-time functionality, enabling the transformation of operational data into actionable insights and business transformation. PI Vision offers the possibility to add self-developed extensions to the already included controls. This is where we come in. We offer you add-ons for PI Vision that are perfectly tailored to your requirements. This way you get the most out of your data.

2. PI Vision

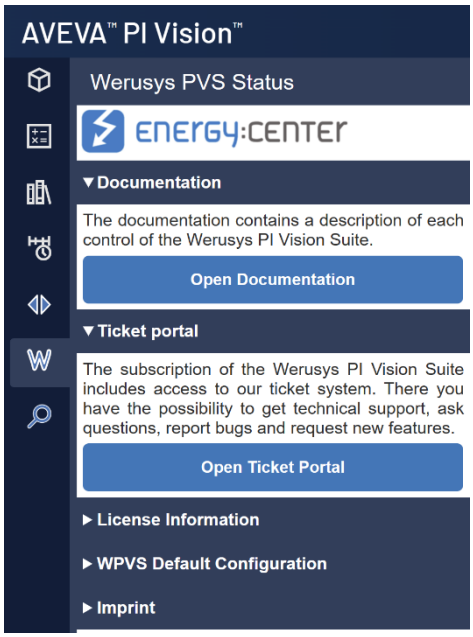
We offer various products for the OSIsoft PI system. In addition to various services, this also includes our PI Vision Suite. With the PI Vision Suite, you receive new PI Vision Controls, which can be installed directly in PI Vision and then easily inserted into the already existing PI system and can be created and configured directly in the browser like the standard models.

If the PI Vision Suite is not enough for you, we develop customised PI Vision Controls for you and add them to the PI Vision Suite.

Your subscription advantages

- **Regular updates**
- **All controls are adapted to the newest PI Vision version and kept up to date**
- **Influence on the next controls to be added to the PI Vision Suite**

3. PI Vision Suite

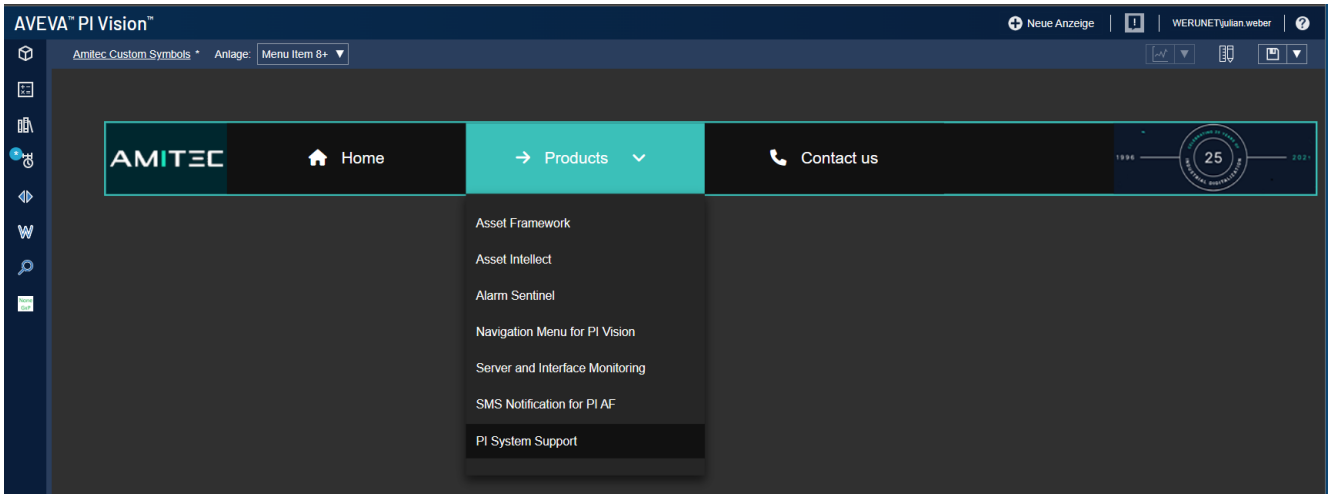


3.1. PI Vision Ticketportal

The PI Vision Ticketportal let you embed your support ticket portal of choice. With this symbol you increase user comfortability and see what problems or challenges your end-users are facing using PI Vision. The standard configuration refers to the Official Werusys Jira Serviceportal.

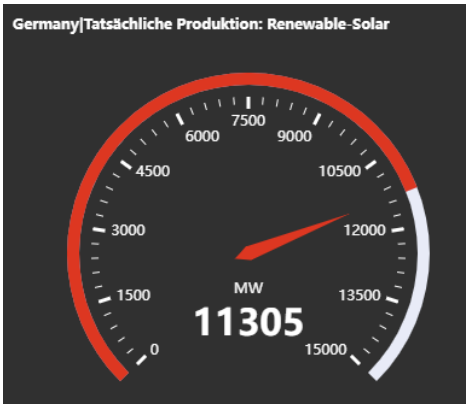
3.2. Navigation Menu

The Navigation Menu is a custom symbol allowing a horizontal navigation bar to be added on PI Vision displays. The menu structure is defined as an AF element structure based on templates. Configuration can be done in any existing AF database, allowing different departments or projects to take ownership of their own navigation structure. The advantage of the symbol is that you can quickly add the same navigation bar on top of all PI Vision displays for a site, and have access to an advanced, multi-level menu structure.



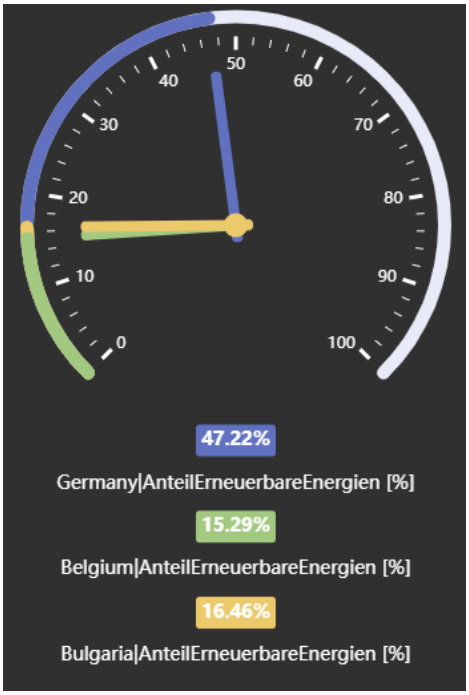
3.3. Gauge

The Gauge is a beautiful and easily customisable control for displaying the current value of an attribute. The PI tag displayed can be adjusted by dragging and dropping the corresponding PI attribute.



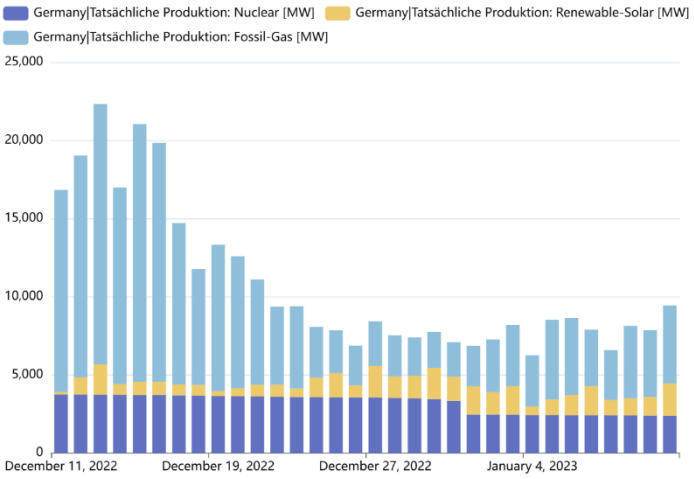
3.4. Multi Signal Gauge

The multi-signal gauge can be used to display multiple values for different assets at the same time. As with the standard gauge, PI tags can be added by dragging and dropping the appropriate PI attribute.

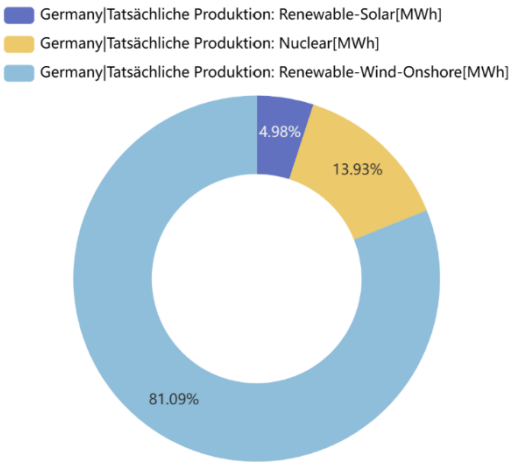


3.5. (Stacked-)Bar Graph

The Stacked Bar Chart provides the possibility to visualize data in the form of a Stacked Bar Chart within PI Vision. It is possible to choose between different time aggregations (days, weeks, months, quarters and years) and different aggregation functions like min, max, avg and many more.
The user can add new signals using PI Vision's normal drag-and-drop interface.

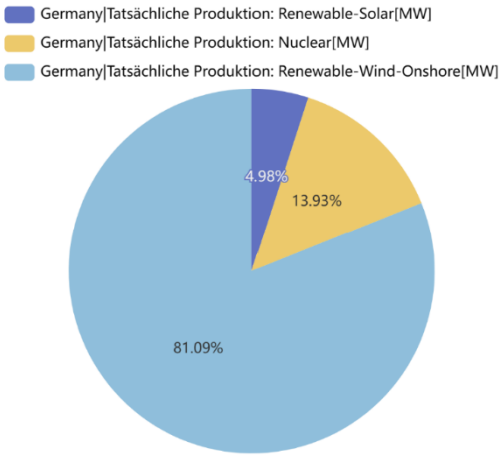


The bars colors, the bin size and the shown decimal points are freely configurable.



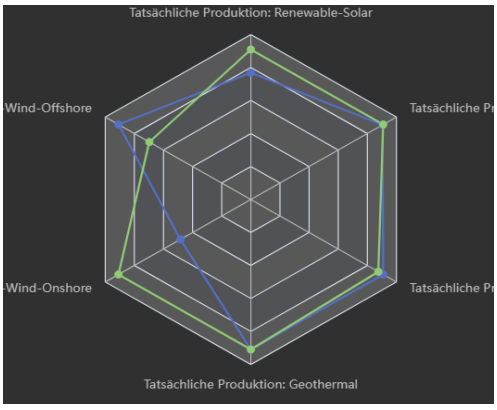
3.6. Doughnut-Chart

The Doughnut Chart widget allows data to be visualised in a doughnut chart. The widget can be configured to show the percentage of each value or the absolute value. Additionally the user can configure anything around colouring.



3.7. Pie Chart

The pie chart widget enables the visualisation of data in a pie chart. The widget can be configured to show the percentage of each value or the absolute value. Additionally the user can configure anything around colouring.

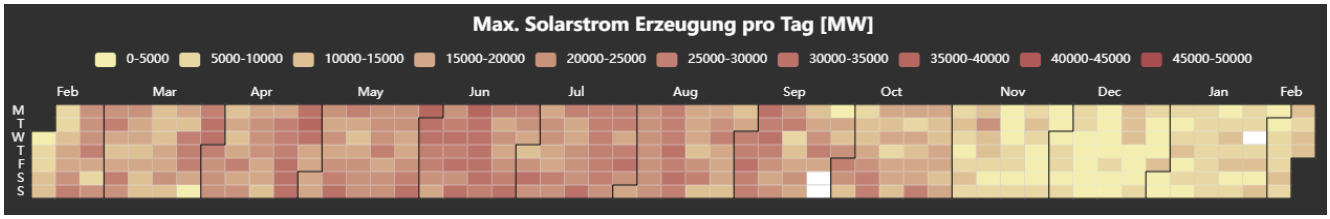


3.8. Radar Chart

The radar chart allows to visualize multiple attributes at different time stamps. The second timestamp which is used for comparison can be manually configured.

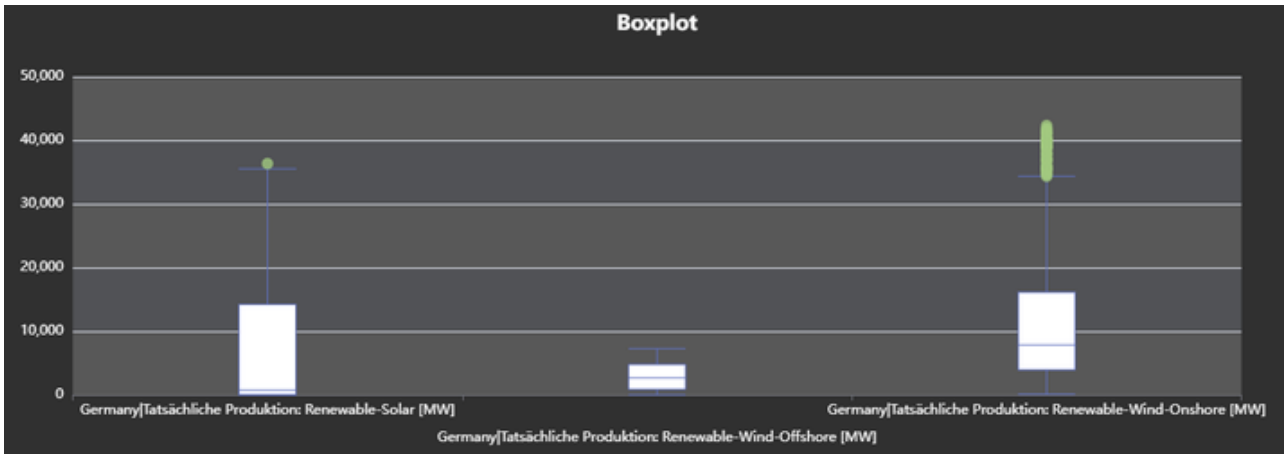
3.9. Heat Map

The heat map creates a graphical representation of data using a colour coding system to represent different values. The user can select different statistics to be displayed for each time window.



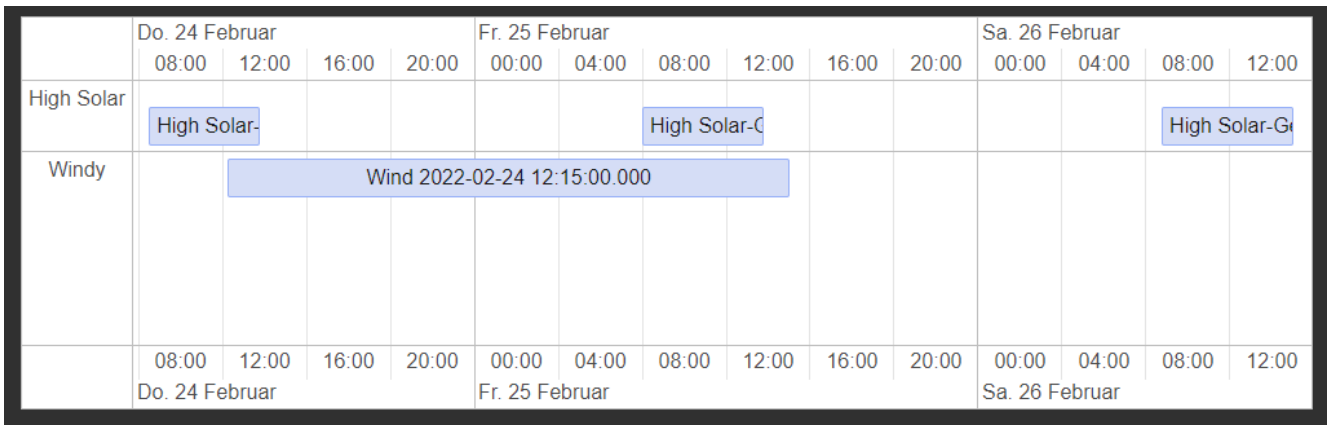
3.10. Box Plot

The boxplot (also known as box and whisker chart) can be used to visually display the distribution of numerical data and skewness by showing the data quartiles (or percentiles) and averages. It is possible to add multiple PI attributes by dragging and dropping.



3.11. Gantt-Chart

AF event frames are presented in a Gantt chart, according to the time range displayed. Additionally, the Event-Frames are grouped according to the Event-Types.



3.12. PI Vision High-Availability

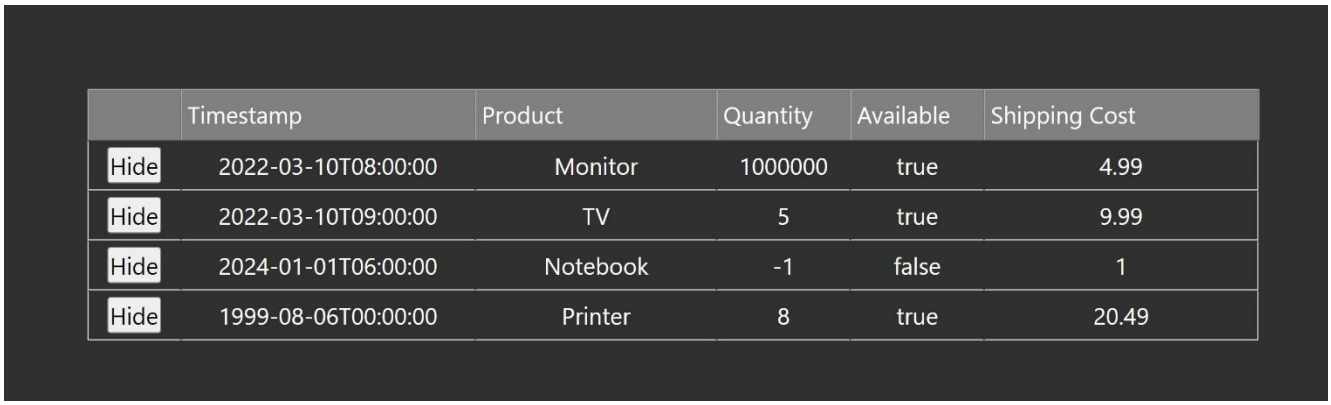
Your PI Vision Displays are used in a control room and a failure of the monitoring of your plant should be prevented at all costs?

Then the PI Vision High-Availability Add-On for the Werusys PI Vision Suite is exactly what you need. The add-on manages your PI Vision displays in a redundant system and automatically detects if one of your PI Vision displays is not working.



3.13. AF Datatable (SQL, MES, AF)

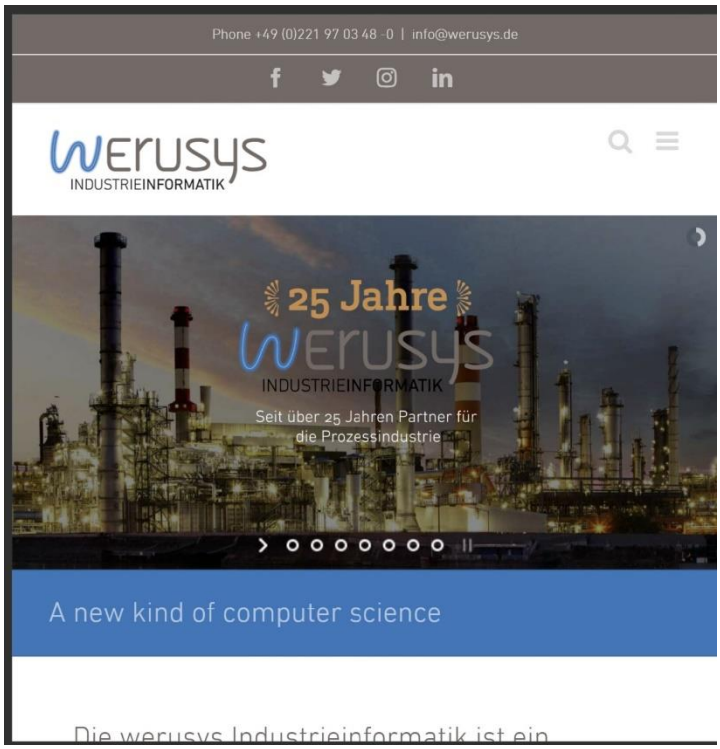
The Table-Control allows the user to display AF-Tables and the contained data. The columns and column names can be configured. Additionally, the user can control the look of the table via the configuration.



	Timestamp	Product	Quantity	Available	Shipping Cost
Hide	2022-03-10T08:00:00	Monitor	1000000	true	4.99
Hide	2022-03-10T09:00:00	TV	5	true	9.99
Hide	2024-01-01T06:00:00	Notebook	-1	false	1
Hide	1999-08-06T00:00:00	Printer	8	true	20.49

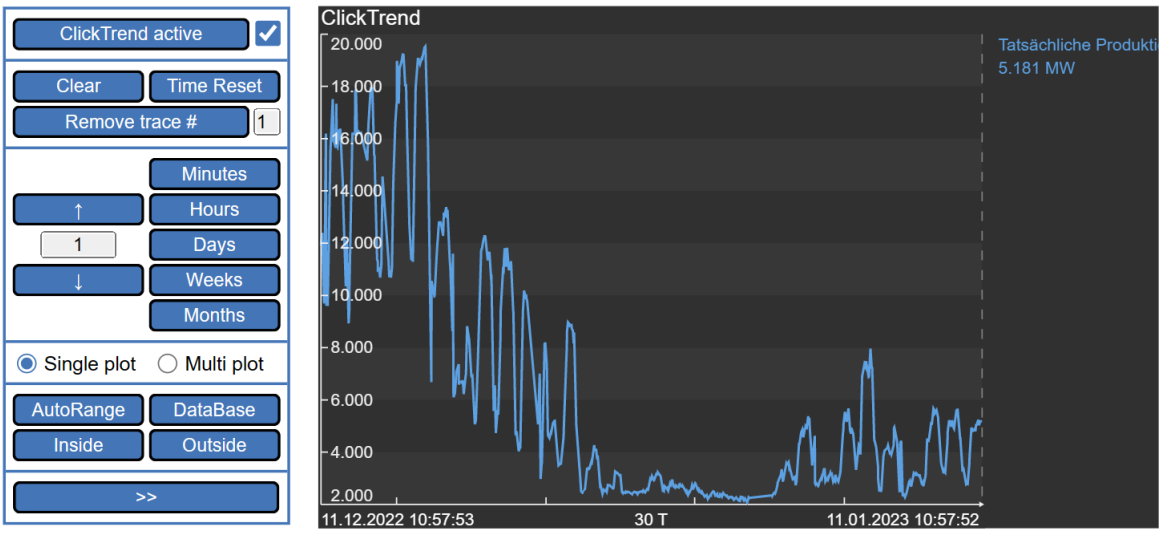
3.14. Embedder

The Embedder Control allows to display a configurable website directly within PI Vision.



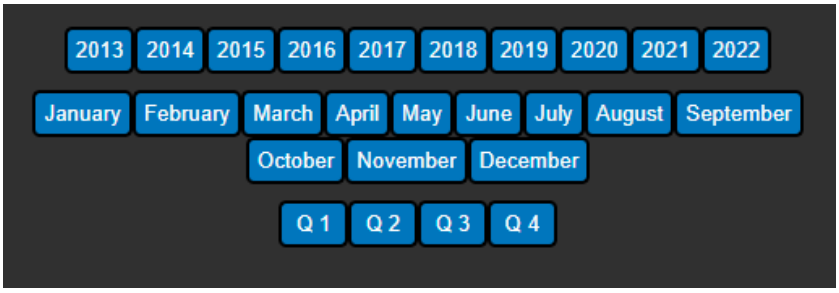
3.15. ClickTrend

The ClickTrend Control allows to monitor the traces of multiple signals within the PI Vision Display with just one click. In the configuration pane the user has different options to change the apparel and the shown time frame. With the button at the bottom the configuration panel can be minimized.



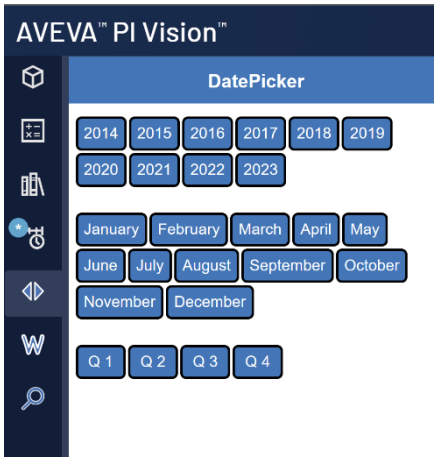
3.16. Date Picker (In Display)

The DatePicker Control allows to adjust the time range of the PI Vision Display with just a few clicks. That enables a quicker and more fluid workflow.



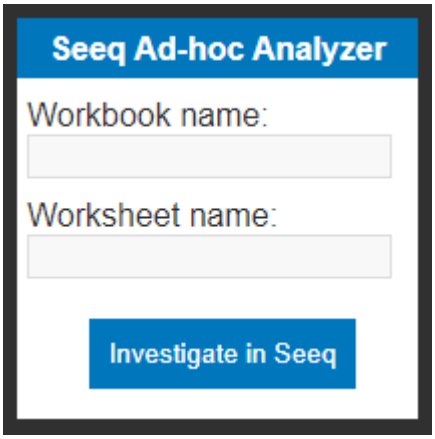
3.17. Date Picker (Sidepanel)

Beside the „In-Display" symbol the Sidepanel datepicker enables you to use the advanced time frame selection in every PI Vision Display without adding it to a display first.



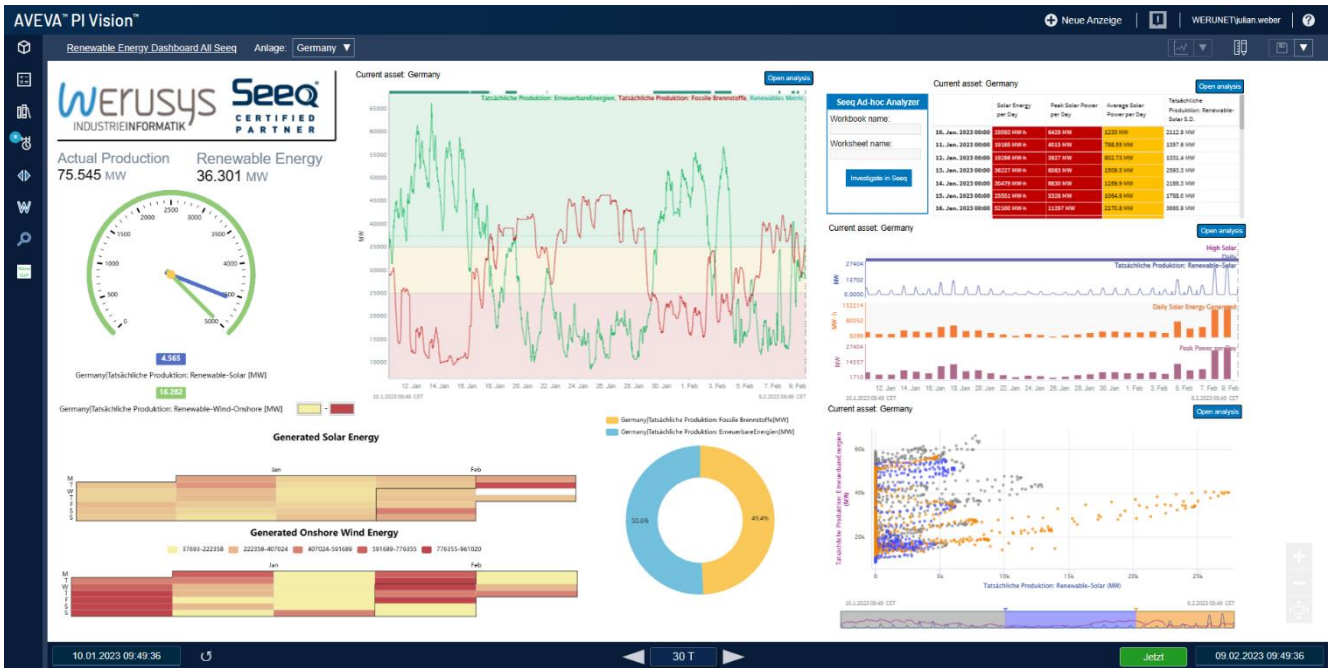
3.18. Seeq Ad-Hoc Analyzer

The Seeq Ad-Hoc Analyzer monitors all signals from attributes and PI tags which are within the PI Vision Display and whenever the user presses the "Investigate in Seeq" button, the control creates a new Seeq Analysis with all signals already included. This makes searching for the signals and navigating through the asset tree no longer necessary. Additionally, the selected time range from PI Vision is adapted by the newly created worksheet to save even more time and step right into the analysis.



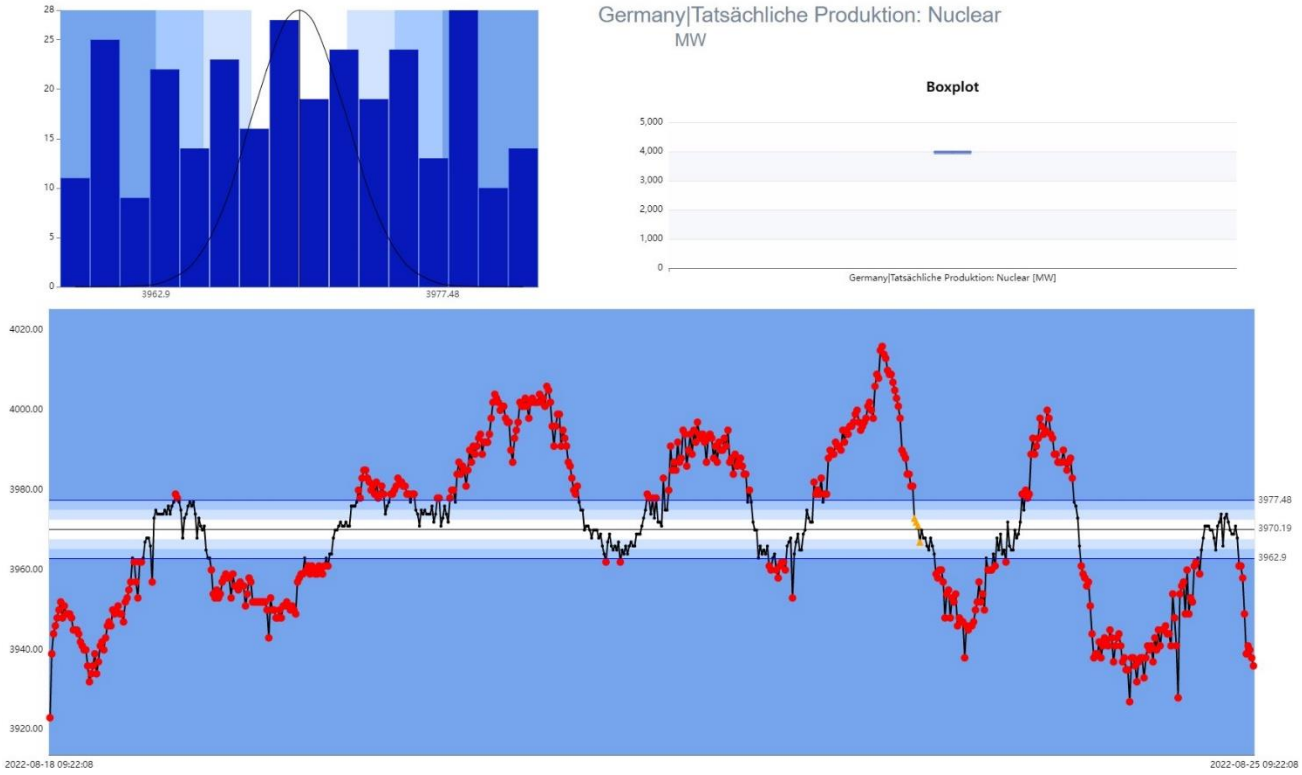
3.19. Seeq Visual Workbench

The Seeq Visual Workbench Control is able to embed Seeq analyses directly in PI Vision. As the control is fully interactive, it is no longer necessary to switch between both applications to view the data. With the help of the “time range adaption” and “asset swap adaption” features the Seeq analysis automatically switches to the time range and asset that the user selects in the PI Vision display.



3.20. SPC Trend (Individual, Average)

In the wake of the end of PI Process Book support, many companies are facing migration to the new PI Vision. One problem is the absence of a popular and useful feature of the Process Books – the SPC/SQC Control. This is where the developed Control for PI Vision comes in. This enables you to use all the features of the SPC Control in the new environment. Furthermore, the Werusys PI Vision Suite provides you with many other controls for PI Vision. In connection with a statistical evaluation of a process, a box plot is of particular interest.



3.21. SPC Histogram

Have you ever wondered how your data is distributed? Would you like to get more statistical information and even detect outliers?

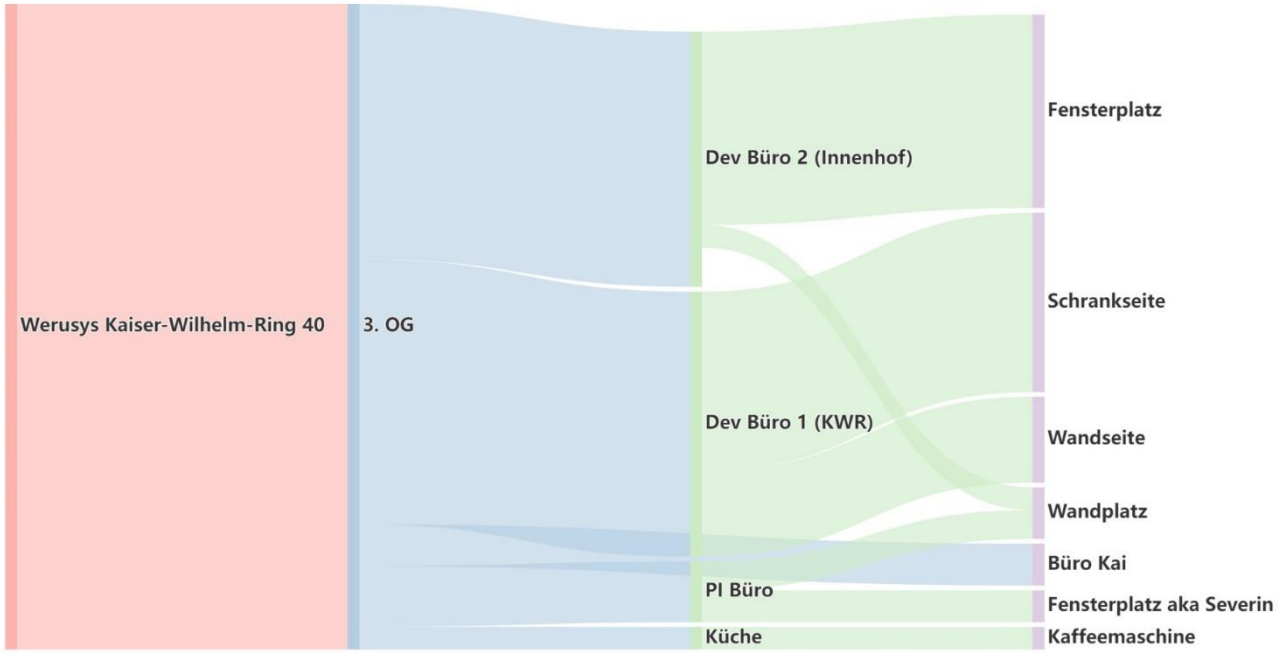
Then you might like this new control. With the new Histogram control, visualizing data distribution has never been easier. Select a few tags, specify the number of bins you want, and you're done!

A histogram is a graphical representation of the frequency distribution of cardinally scaled features. It requires dividing the data into classes, which can have a constant or variable width. The height of each rectangle then represents the (relative or absolute) frequency density, that is, the (relative or absolute) frequency divided by the width of the corresponding class. The histogram can be easily added to a PI Vision display by dragging and dropping a PI attribute or PI tag.

3.22. Sankey-Diagram

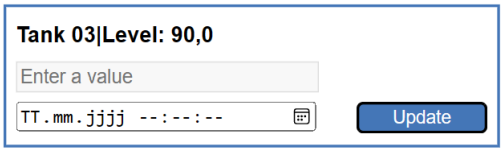
The Werusys Sankey symbol can be used to display aggregated values in a diagram where the width of the connection is proportional to the size of the value. Sankey diagrams are important tools for visualizing energy and material flows as well as inefficiencies and potential savings in the use of resources. These are often material flows in a process or energy consumption in a company. This gives the user the opportunity to get a quick overview of flows within his company.

The visualization by the Sankey symbol makes it possible to easily identify large flows within a company or process: They are useful to identify large contributions in an overall flow.



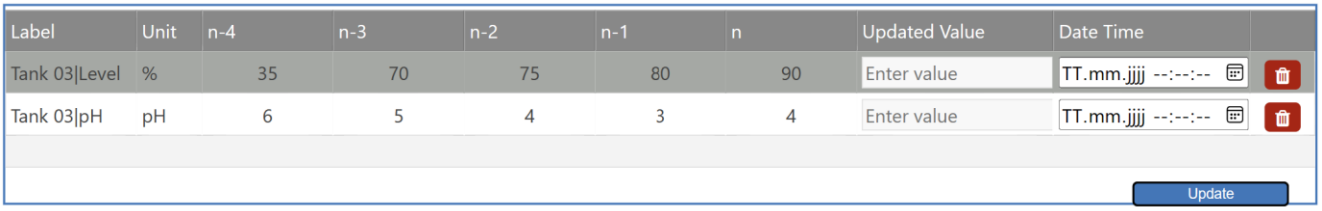
3.23. Single-Data Entry

The PI Vision Single-Data entry control allows manual entry on definable PI Tags. The displayed PI tag is freely selectable and configurable.



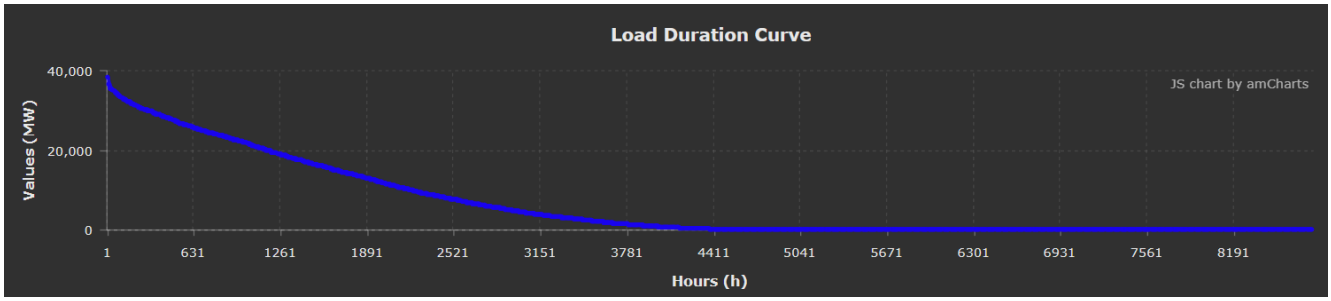
3.24. Multi-Data Entry

The PI Vision Multi-Data entry control allows manual entry on definable PI Tags. The displayed PI tags are freely selectable and configurable. Furthermore, the number and sampling rate of the last acquired values can be set.



3.25. Load Duration Curve

The Load Duration Curve will display data sorted in a descending order of magnitude, for a duration of one year. Load Duration Curves (LDC) are commonly used in the electric power generation and transmission industries, f.ex. to display load percentages (Y) compared to the runtime hours (X) across one year, or the relationship between generating capacity requirements and capacity utilization. The symbol can also display Price Duration Curves.



3.26. GxP Watermark

You are working GxP compliant and want to bring your practice also to PI Vision?
With the GxP Watermark symbol you can mark which PI Vision Displays are created GxP compliant and which might be created Ad-Hoc.
The symbol is easy to configure and can distinguish between GxP relevant PI Vision Servers, dedicated GxP relevant PI Vision folders and even if a PI Vision Display contains GxP relevant PI Tags.

