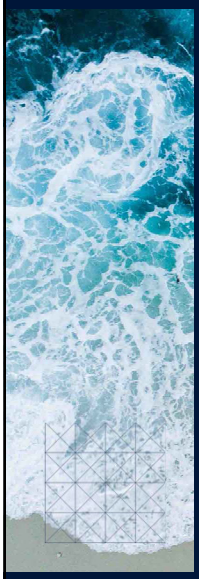

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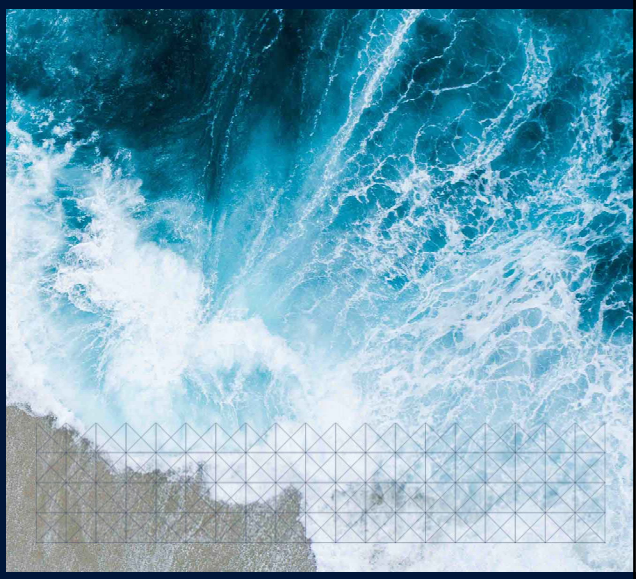
TRENDS AND REPORTS



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Trends and Reports

References

- Kongsberg K-Chief 700 Integrated Control System Product Description, 304844/B
- Kongsberg K-Chief 700 Operator Manual, 332618/B

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Content

- Time series concept
- Different trend images
- Presentation of the trend
- “Measurement ruler”
- Trend properties
- Timespan
- Make a new trend
- Report manager
- Report System

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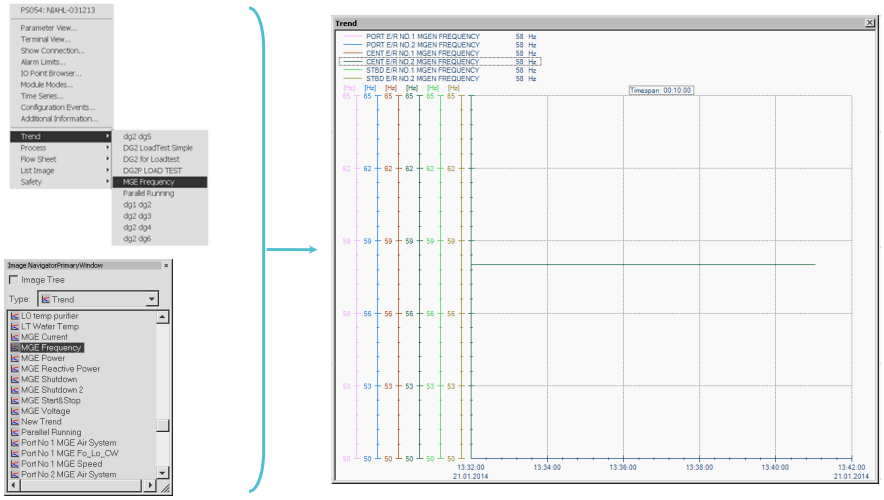
The Trend image



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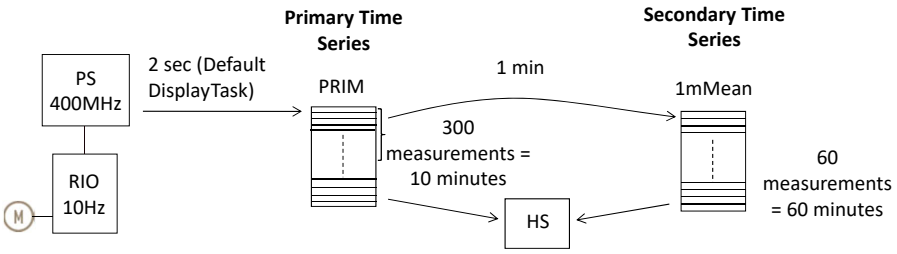
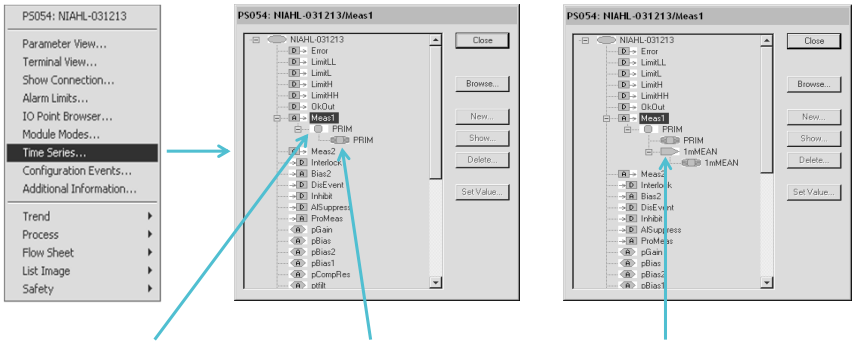
Time series

- When configured, a value from the module is put into a time series in the PS memory
- A secondary time series can be created based on different calculations on the primary series
- All time series can be saved on the History Station



Time series view

Context menu



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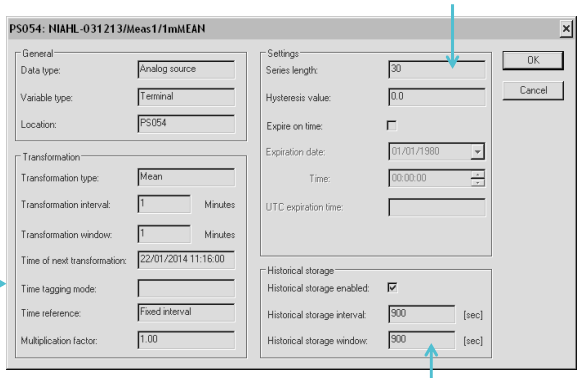
Time series Properties

Length of time series with hysteresis



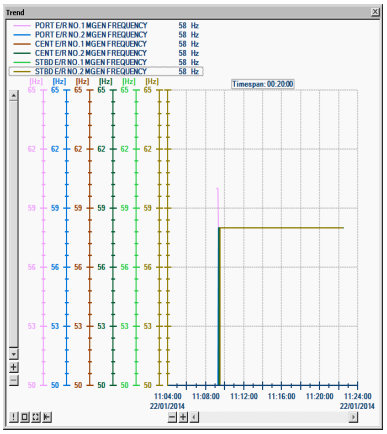
Transformation properties

(Used for the Secondary Time series)

Historical storage interval in seconds (Default values)

Curve lifespan

- Without time series: the trend will only show the current values when the trend image is open (tag/terminal)
- With time series: the trend will show the terminal value and the historic values form the time series (tag/terminal/PRIM)
- If the trend is linked to a History Station, the values stored in the HS appears in the trend image (tag/terminal/PRIM/HS)



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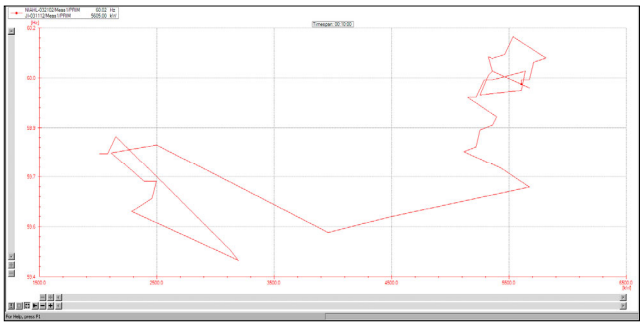
Types of Trend

- There are two type of trends in the System:

Time trend: Values for a single process variable versus time. Max 10 curves.

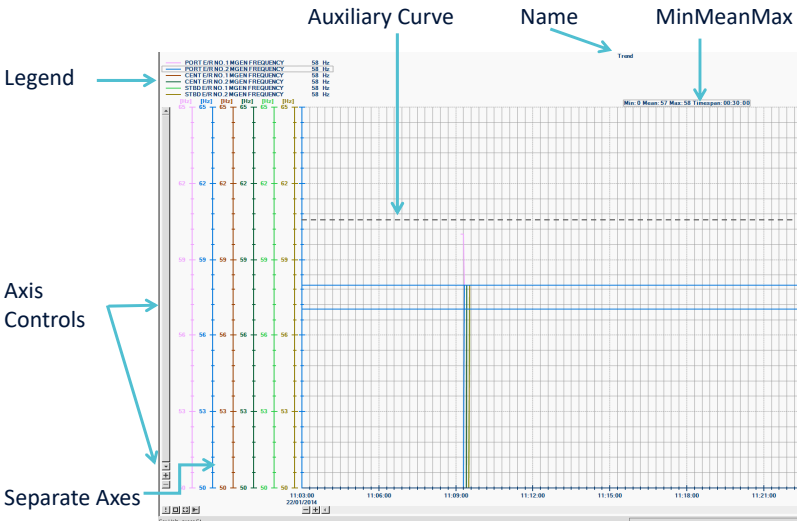
XY trend: Values for two process variables for a defined time span, e.g. frequency compared to load. Max 4 curves.



Trend shortcut menu

- Presentation: Presentation options
- Static: Updating of the trend is stopped
- Rectangle Zoom: Zoom in a part of a trend, no updating is done (Static Presentation)
- Auto Scale: Continues update of vertical axes according to measurement
- Make Popup: Creates a Trend Pop-up window
- Print: Print a copy of the trend to default printer
- Cut/Copy/Paste: Of curves
- New Curve: Add new curve to the Trend image
- Properties: Set the different properties for the trend

Presentation



Axis Controls

- Toggle static mode
- Toggle rectangle zoom mode
- Toggle auto scale mode
- Restore default axis range
- Zoom out the time values
- Zoom in the time values
- Scroll to pan axis values

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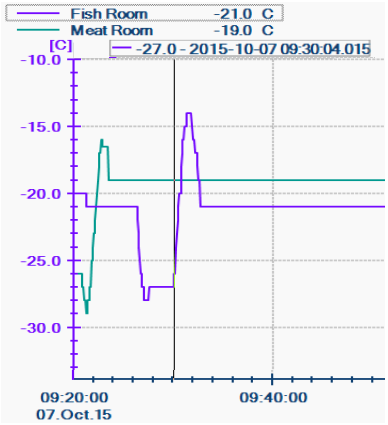
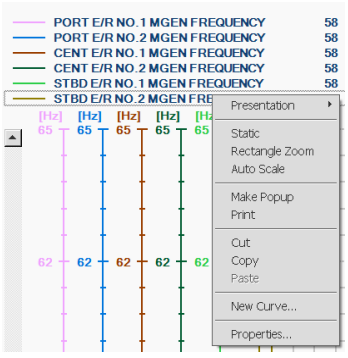
Measurement Ruler

- To use the measurement ruler:
  left-click and hold the mouse button down and move the measurement ruler along the curve



Adding curves to a Trend image (1)

- Copy curves from one Trend image to another
- After the changes has been done, remember to save the image with a new name



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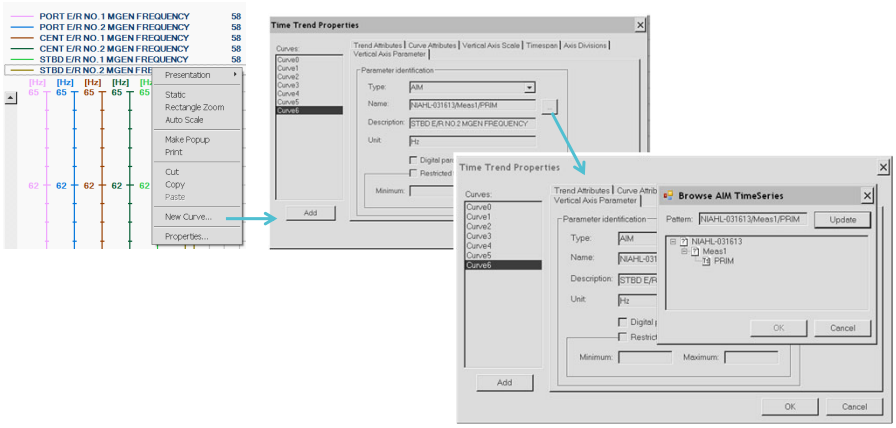
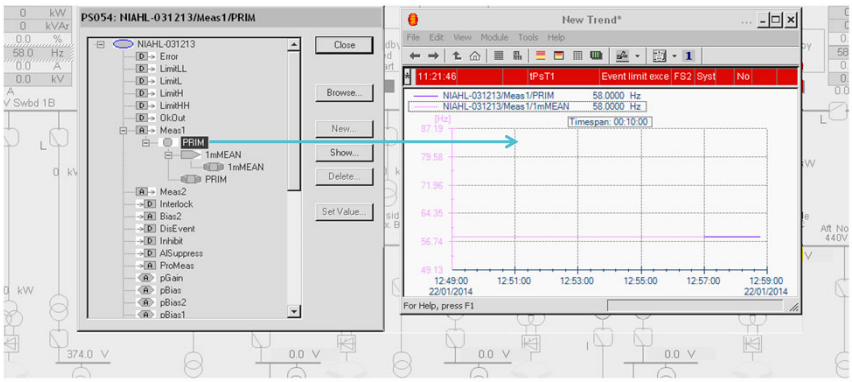
Adding curves to a Trend image (2)

- Adding curves from the Trend menu



Adding curves to a Trend image (3)



- Open the Time series for the relevant Tag
- Highlight the correct Terminal or time series
- Drag and drop into the trend image

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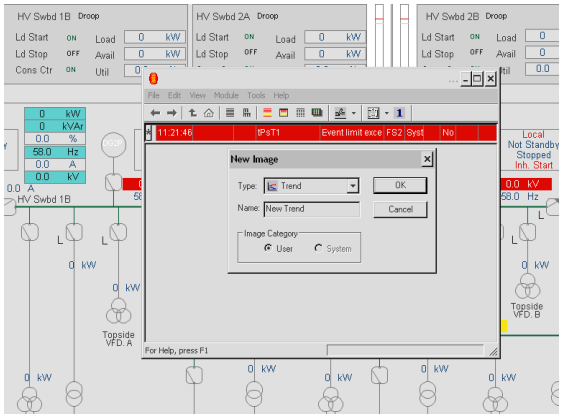
New Trend Image (User trend)

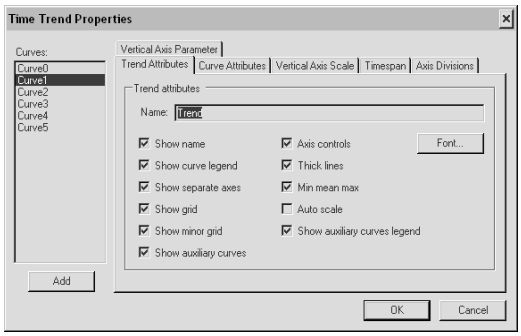
How to make new trend images:

- File → New Image
- Give the trend a name
- Click “OK”
- Add curves
- Save



Trend Properties

- To open the Time Trend Properties view: right-click in the image → Properties
- The Trend Attributes applies to all curves regardless of the selected curve



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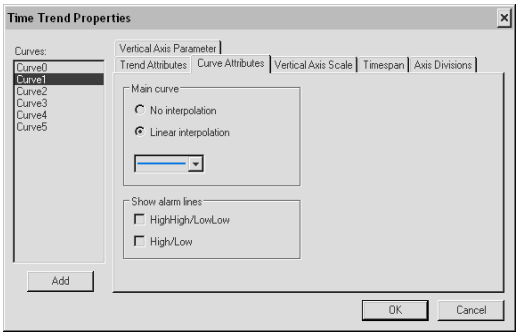
Curve Attributes

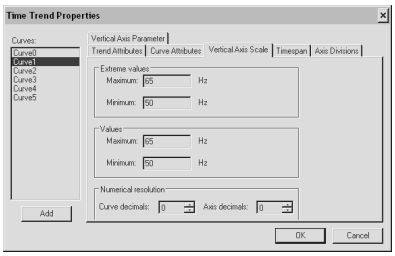
- The Curve Attributes applies to the selected curve
- No interpolation: Dotted line
- Curve colour can be selected
- Alarm Lines can be displayed in the trend image (Show auxiliary curves must be selected (Trend Attributes))

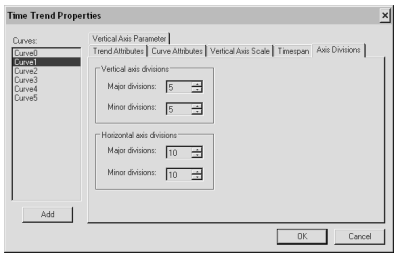


Vertical Axis Scale and Axis Division

- Vertical Axis Scale: Sets the max and min values of the chosen curve
- Extreme values: Max and min limits
- Values: Max and min values displayed (Must be within extreme values)

- Axis Divisions: Sets the values of major and minor divisions on the horizontal and vertical scale





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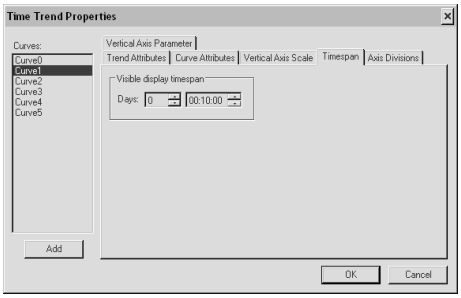
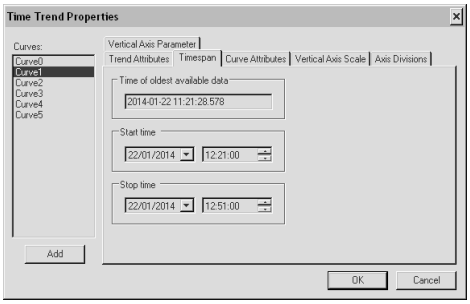
Timespan

- Defines the horizontal axis scale (all curves)

Dynamic trend



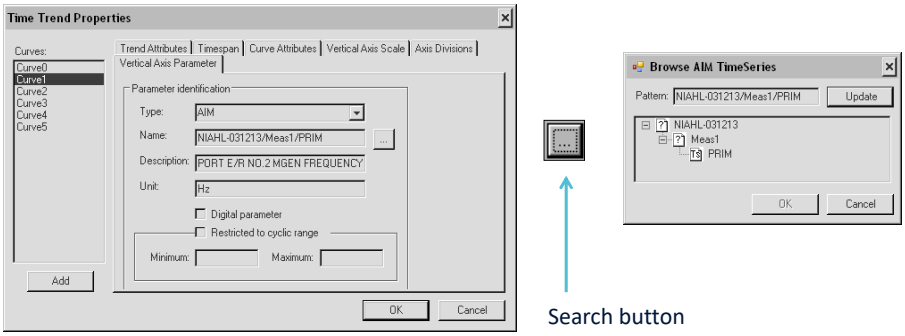
Static trend



Vertical Axis Parameter

- Defines the Tag name/Terminal/Time series for each curve

Add Description and unit



Search button

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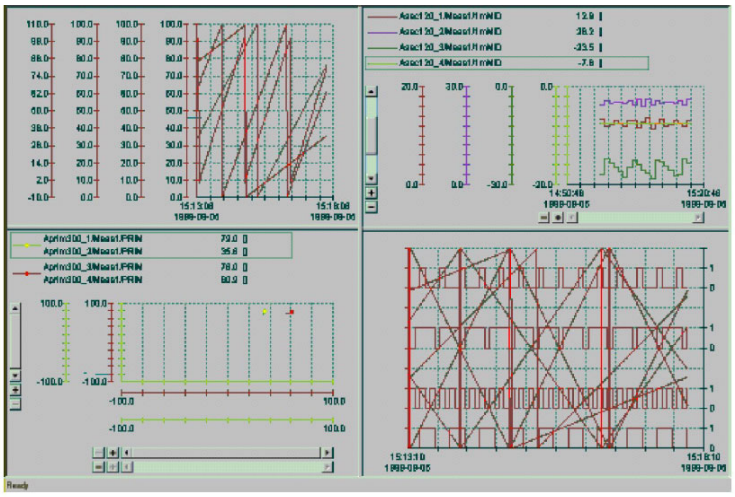
Layout Mode

- It is possible to split a Trend image into several Trend images by using «Layout Mode»
- Click «File» and choose «Layout Mode»

- The Trend shortcut menu has two new options; Split Vertically & Split Horizontally



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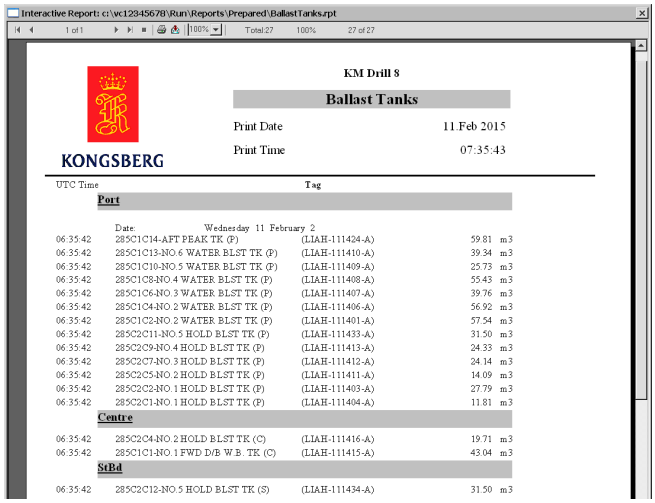
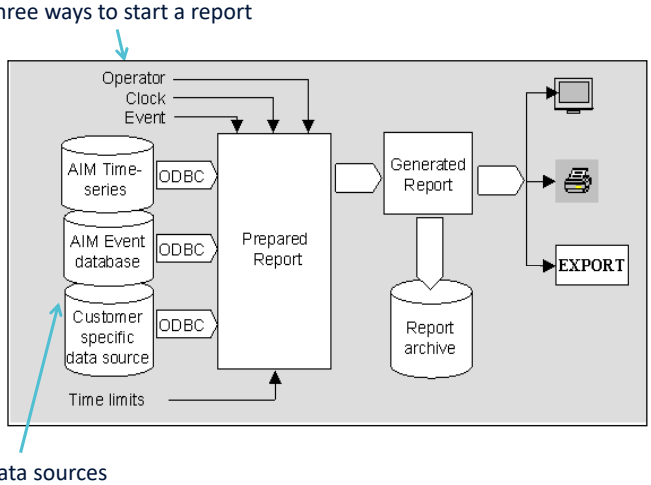
Example of a Report



Reports

Three ways to start a report



Data sources

The report can be:

- Displayed on a monitor
- Printed out
- Saved as a file

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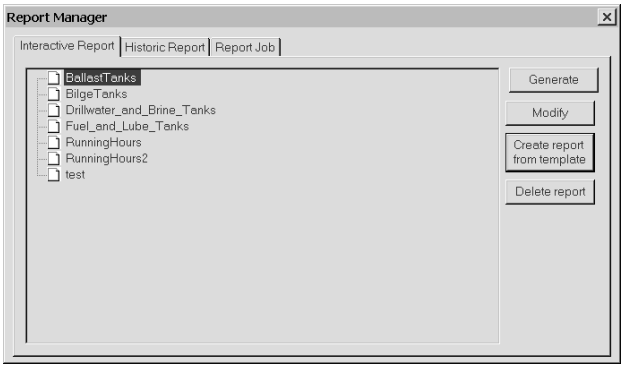
Reports

Report tool

- Interactive Report: Prepared Reports
- Historic Report: Report archive
- Report Job: Scheduled reports jobs



Report Manager

- **Generate:**
  Collects data into a prepared report and display it on the monitor
- **Modify:**
  Modification of a prepared report
- **Create a report from a template:**
  Create your own prepared report based on some standard templates
- **Delete report:**
  Delete a prepared report

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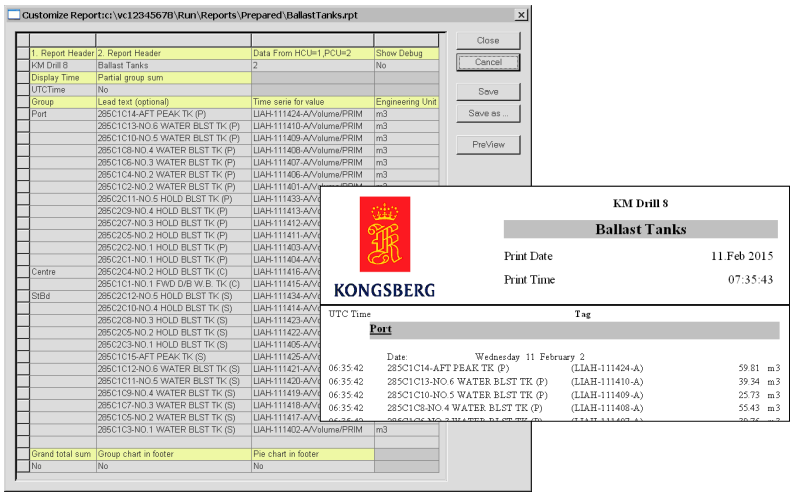
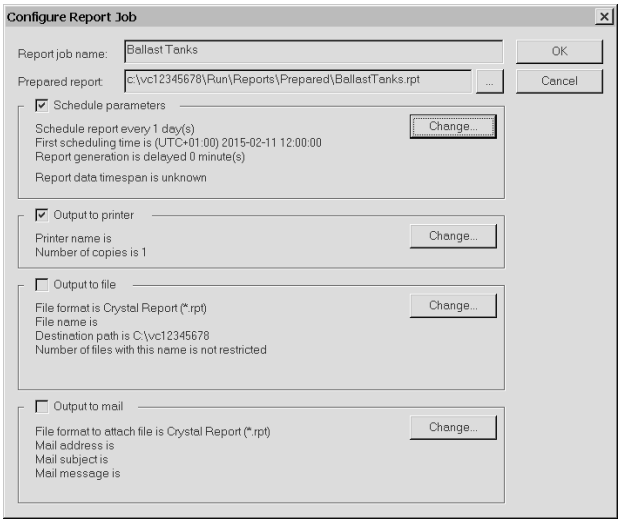
Modify / Create report



Report job

- This report job generates and print the Ballast report every day at 12:00



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Exercises:

- Trends
- Make a user trend
- Report

Learning Objectives

- Explain/Understand the Time Series concept
- Be aware of the different ways of displaying trend images
- Recognize different types of trend images
- Be able to change the presentation of the trend
- Identify the “Measurement ruler”
- Access the Trend properties and understand what happens when changing the different settings
- Identify the timespan used and understand/explain the different timespans that can be presented in the trend
- Use trend to present a desired value
- Access Report Manager
- Generate a report
- Configure a schedule report
- Memorise the two functions Modify and Create a report


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