Intro to PiWeb Designer

PiWeb Reporting and Reporting Plus

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Learning Objectives

Upon completion of this module you will be able to…

1. Open and navigate PiWeb Designer
2. Customize the headers on Zeiss Templates
3. Create reports with form plots and line charts.

1. Opening and navigating PiWeb Designer
2. Creating Custom Headers
3. Graphic Displays in PiWeb

Designer Interface

Section 1

Open Designer from Calypso

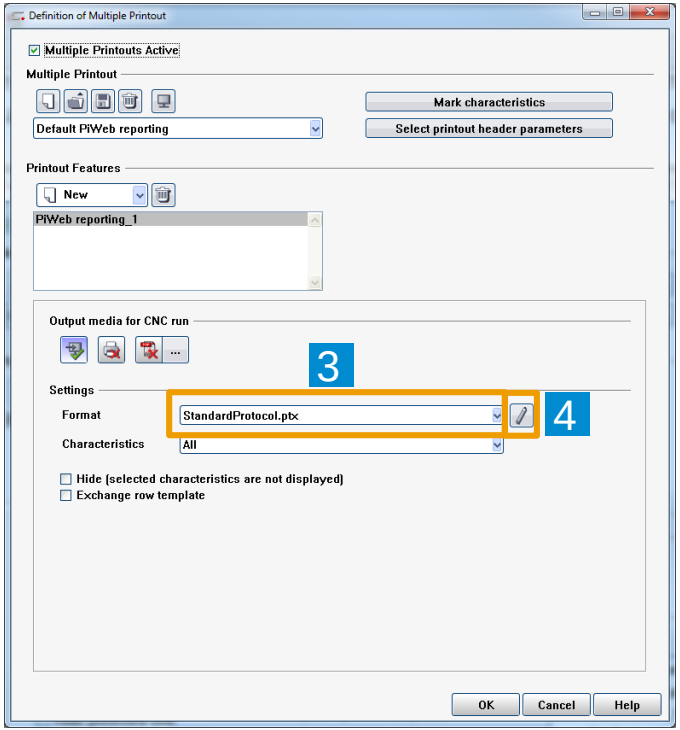
Program your reporting needs for each program into Calypso.

Steps to turn on PiWeb Reporting

1. Click the Measurement Tab
2. Click Multiple Printouts
3. Select the Report Template to edit
4. Click the pencil
5. For Zeiss Templates, choose Generic or Measurement Plan Specific

*In Calypso 2015 (version 6.0) there is an edit template button instead of a pencil.

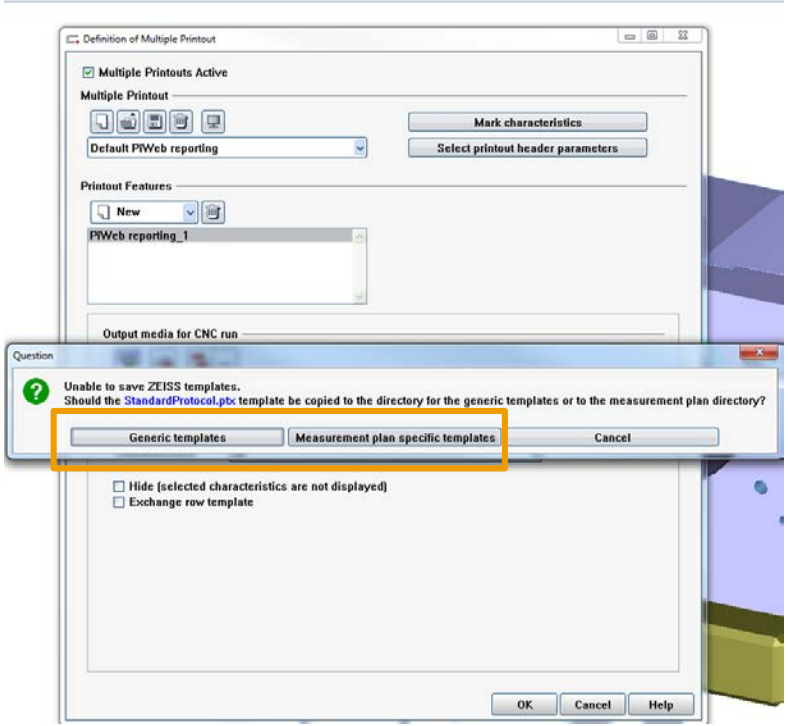
Open Designer from Calypso



The multiple printouts window is where most of the settings for PiWeb Reporting are made.

Clicking the pencil icon from this window will open PiWeb Designer to edit whichever template is currently selected.

Open Designer from Calypso



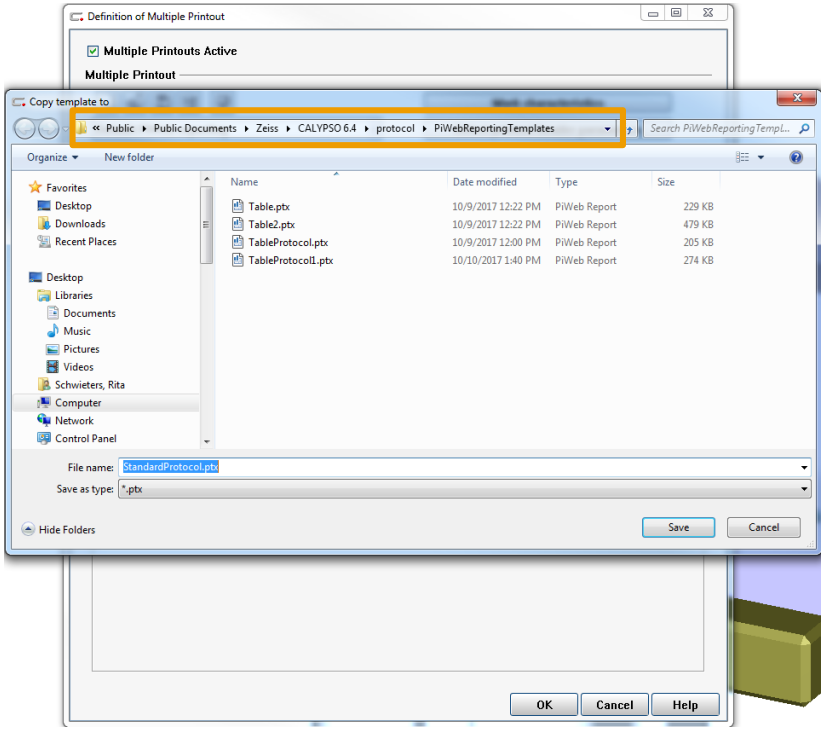
When you try to edit a Zeiss template, this window will open.

To protect the original Zeiss templates, you are required to save a copy that will be edited.

This copy can either be Generic or Measurement Plan Specific.

Generic Templates are able to be used for all parts. The Zeiss Templates are Generic so we will typically choose Generic when editing these.

Open Designer from Calypso

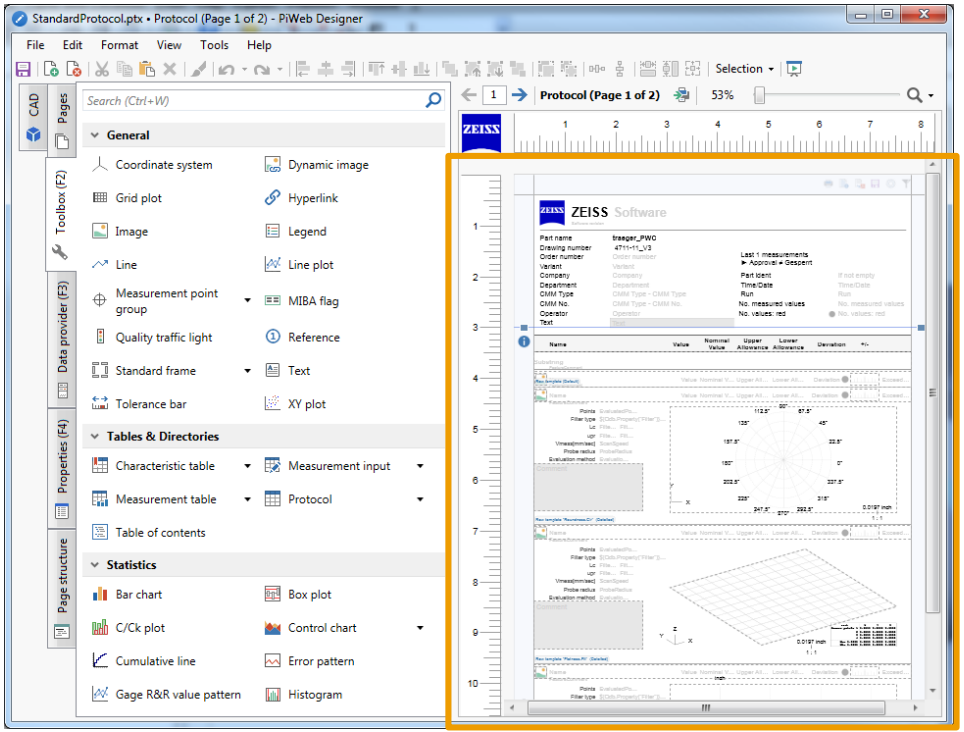


You will be prompted to name the file. When editing the Zeiss templates, I like to keep the Zeiss name and add a company name. For instance StandardProtocol_MyCompany

Also, notice where the file is stored. This is where generic templates are saved. Calypso will look here for templates.

You can find templates here if you are sharing with another division of your company or if you are trying to send your template to the support team.

Designer

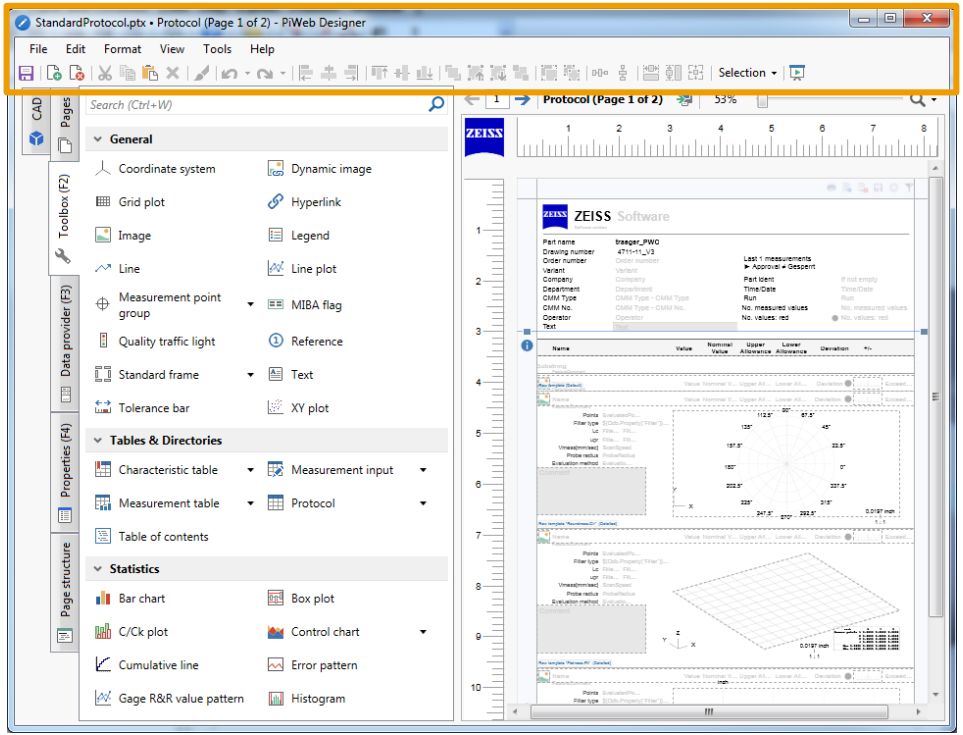


PiWeb Designer Opens.

The work area contains the page template. The Standard Protocol is a pretty advanced template. We will not be editing elements within the table itself. But you could edit elements here if you wanted.

We will be editing the header area to include the header parameters we are inputting in Calypso. And we will add a company logo.

Designer

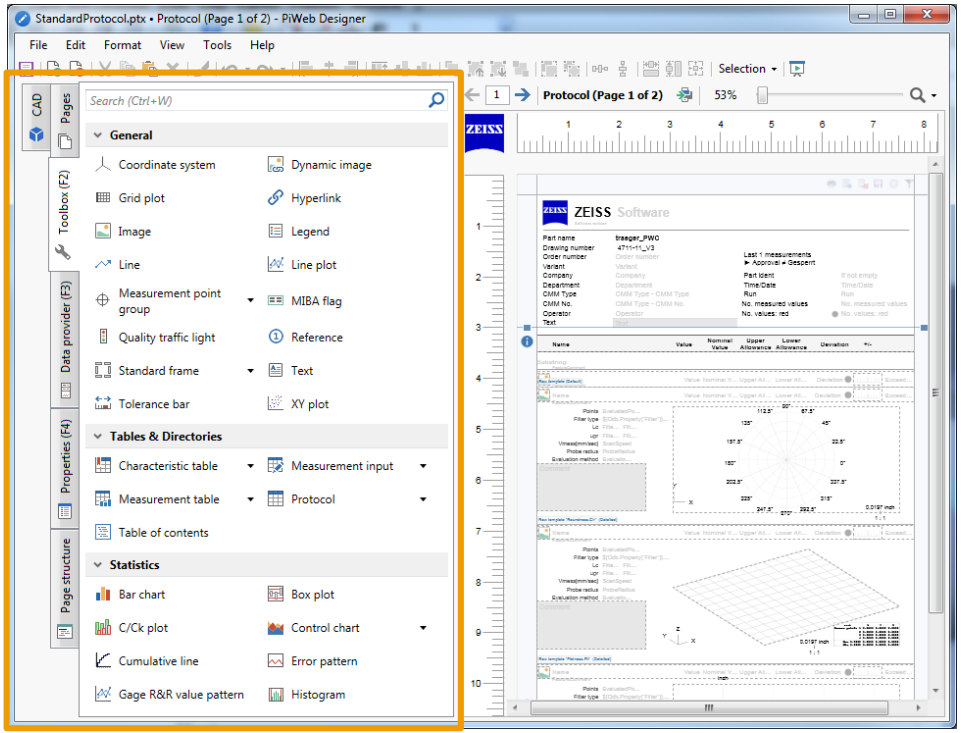


In Designer, you have your basic Windows drop downs: File, Edit, Format, etc. There are specific tools in each of these to help with templates.

Specifically, the tools drop down has options for decimal places, units, page size, and others.

The toolbar has helpful buttons like adding and deleting pages, a paintbrush, and element alignment tools. The Play button is to preview the report in PiWeb Monitor.

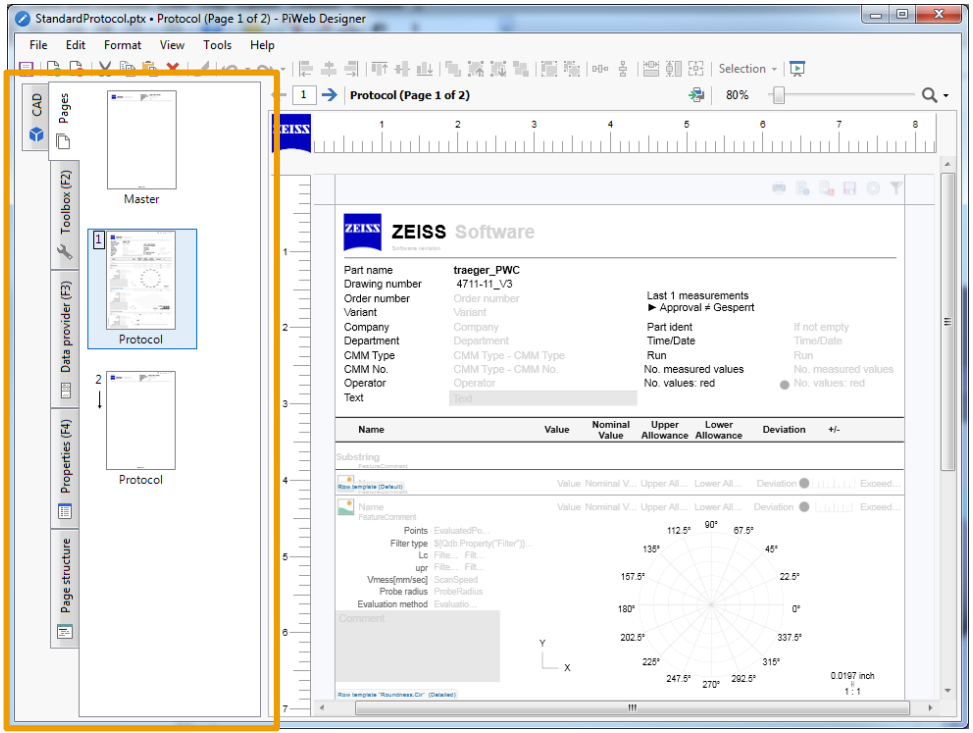
Designer - Toolbox



The tabs on the left side contain different steps in the element creation process.

Each tab changes the options in the window to the right. Here, the toolbox has loaded and each element is shown.

Designer - Pages



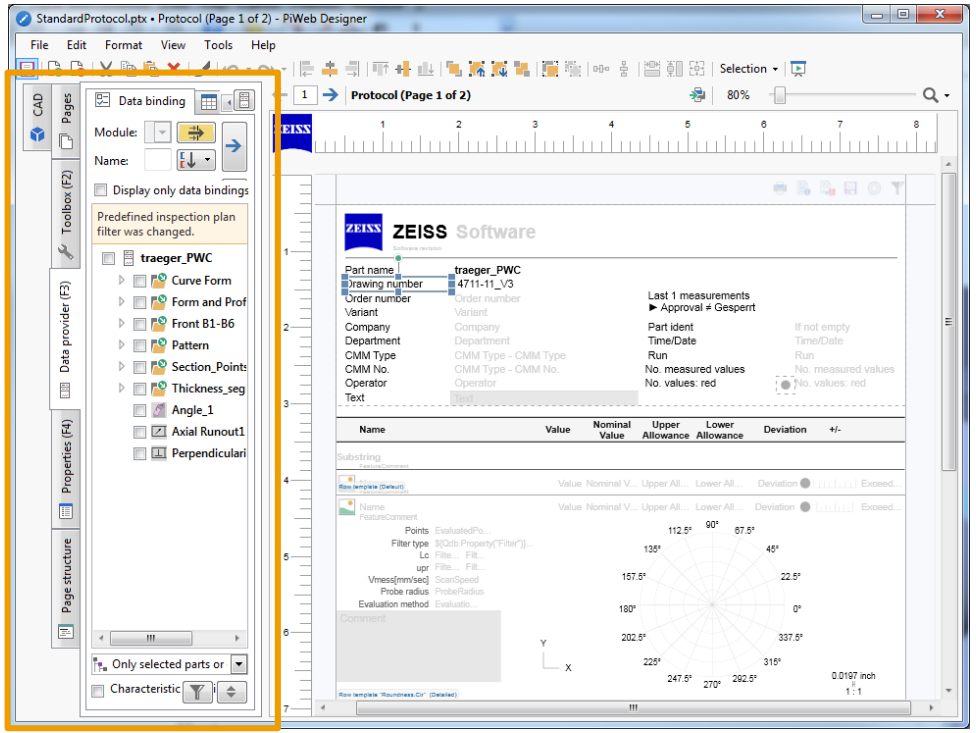
The Pages tab shows each page template in the report.

You can name pages and change some of their properties from here.

There is a Master Page in this tab. The Master Page allows you to have a template for all pages, that you don't have to keep recreating.

In this report there is a different first page and following pages. We will need to change the header for both.

Designer – Data Provider



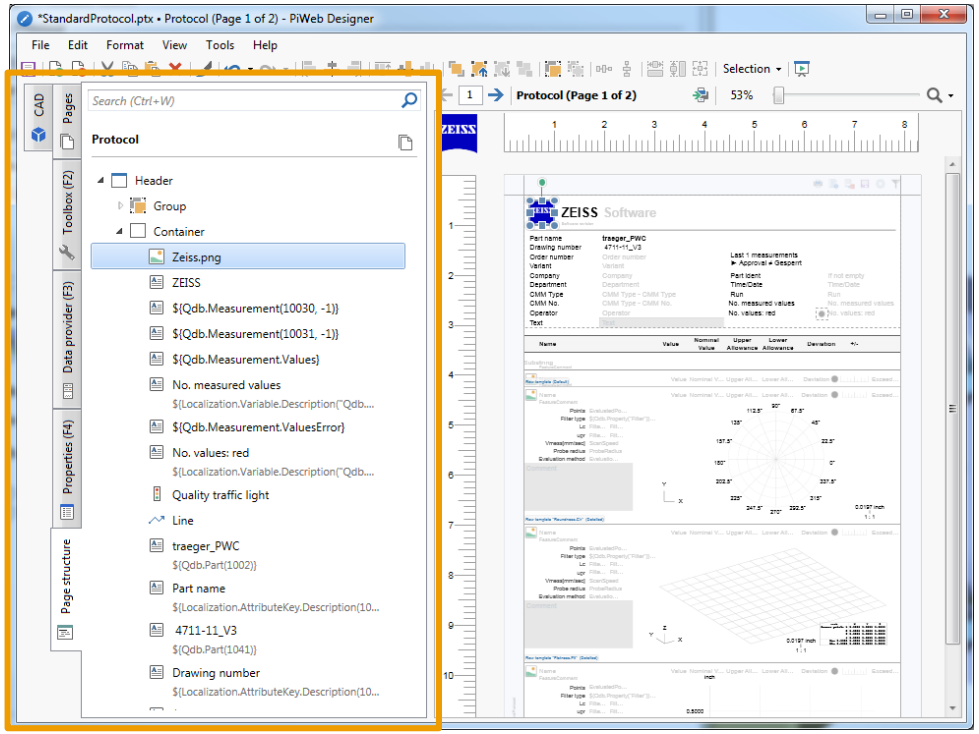
The Data Provider tab shows the measurement plan.

If an element is selected while on this tab, check boxes appear next to each item in the measurement plan.

This is how you tell PiWeb where to grab data from.

You can also change the number of measurements, add filters, and create sorting rules from this tab.

Designer – Page Structure



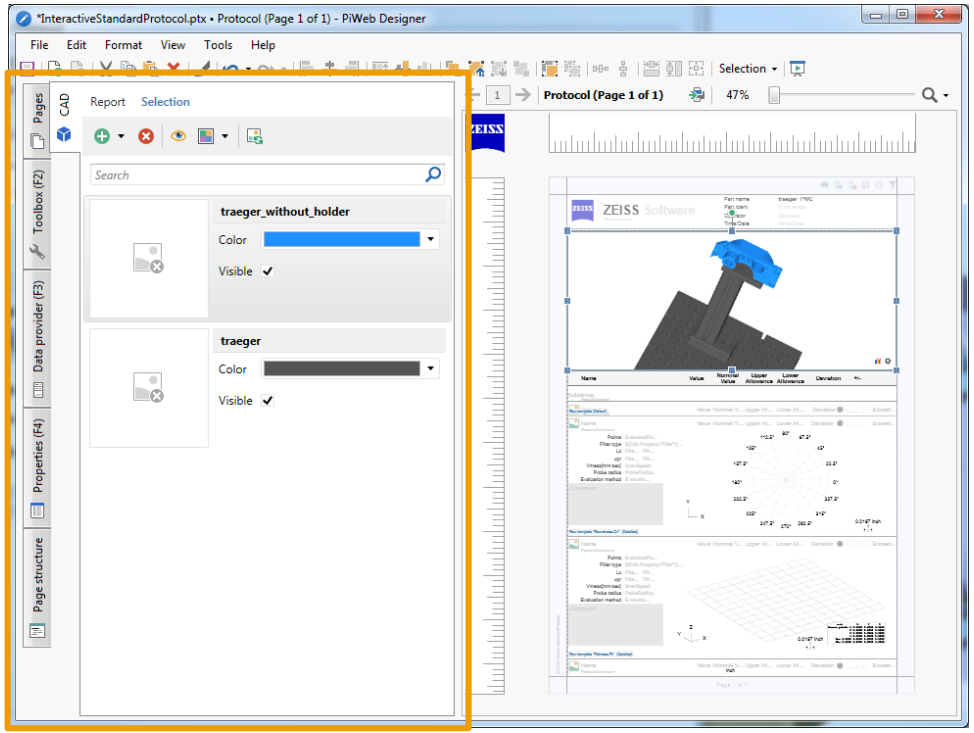
The Page Structure tab is a hierarchical view of the page template.

This is extremely useful for linear thinkers and programmers.

It is also helpful when an element gets “lost” on the page or if you can’t figure out what something is.

Notice, when an element is selected on the page, it highlights in the hierarchy.

Designer – Page Structure



New in 2017, the CAD tab allows you to load Cad models that can be moved around in Monitor.

You can also change the color of the model from this window.

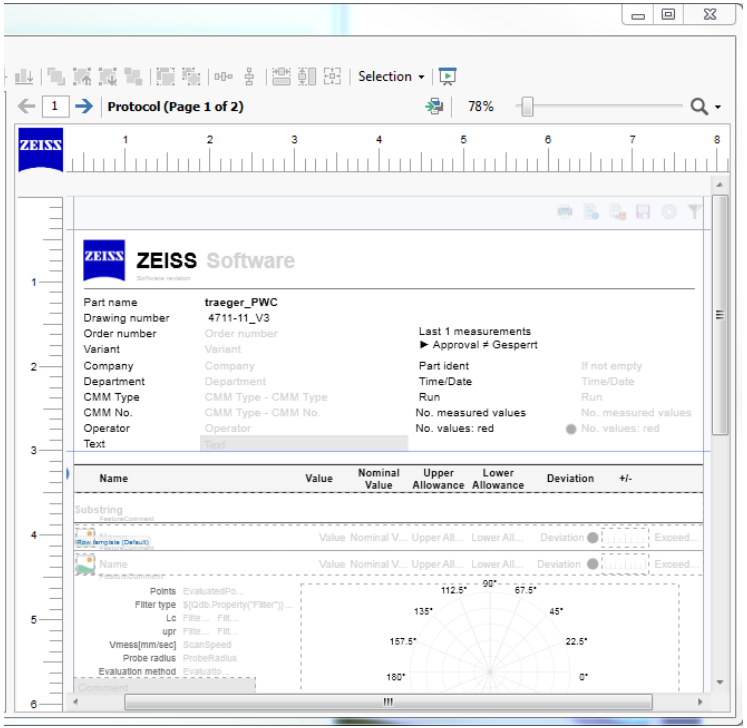
And you can add multiple layers, like fixtures, and make them different colors.

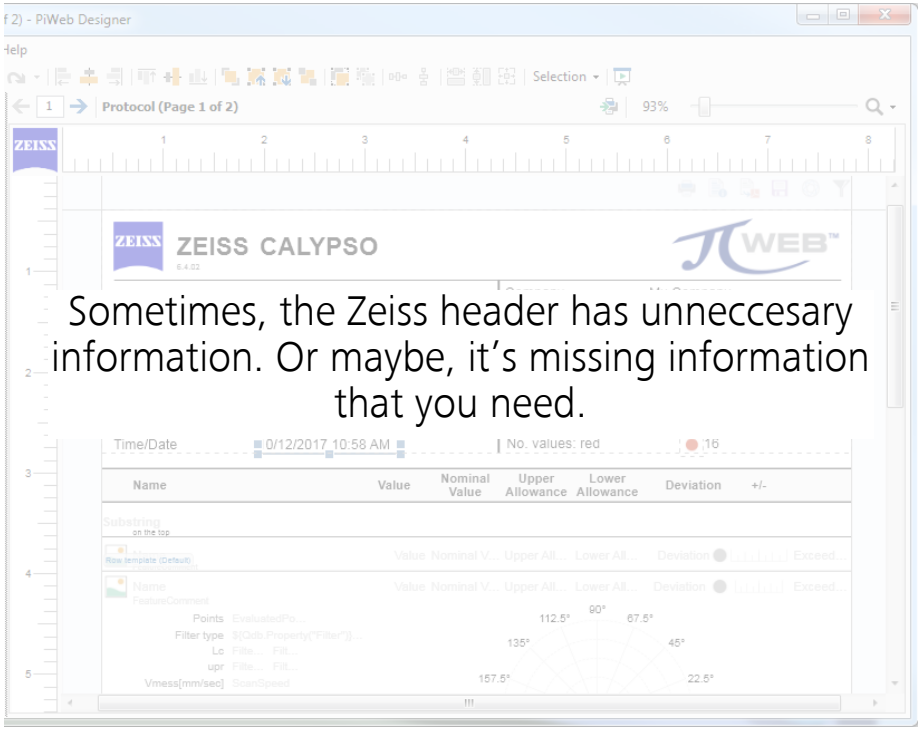
*Data points do not display on the model, but status indicators will.

Custom Headers

Section 2

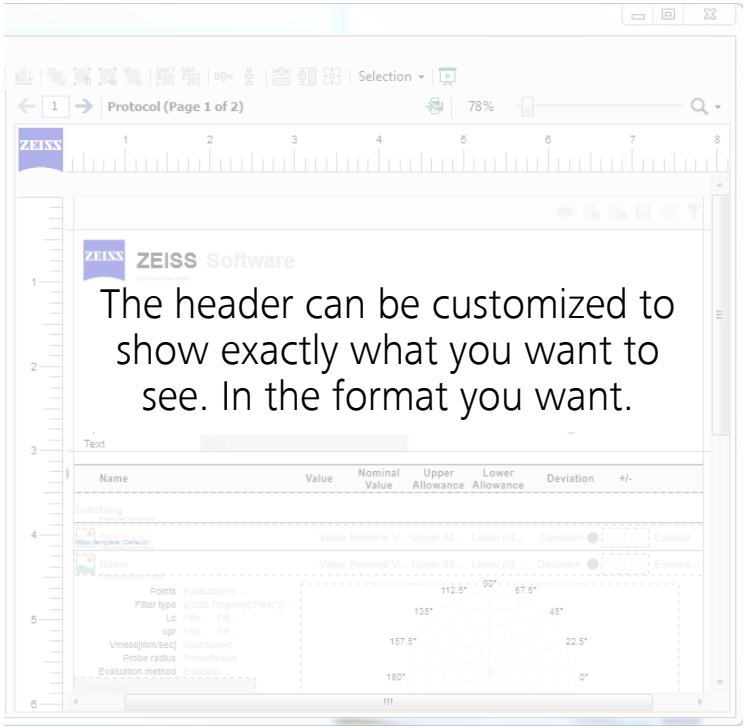
Customize your headers

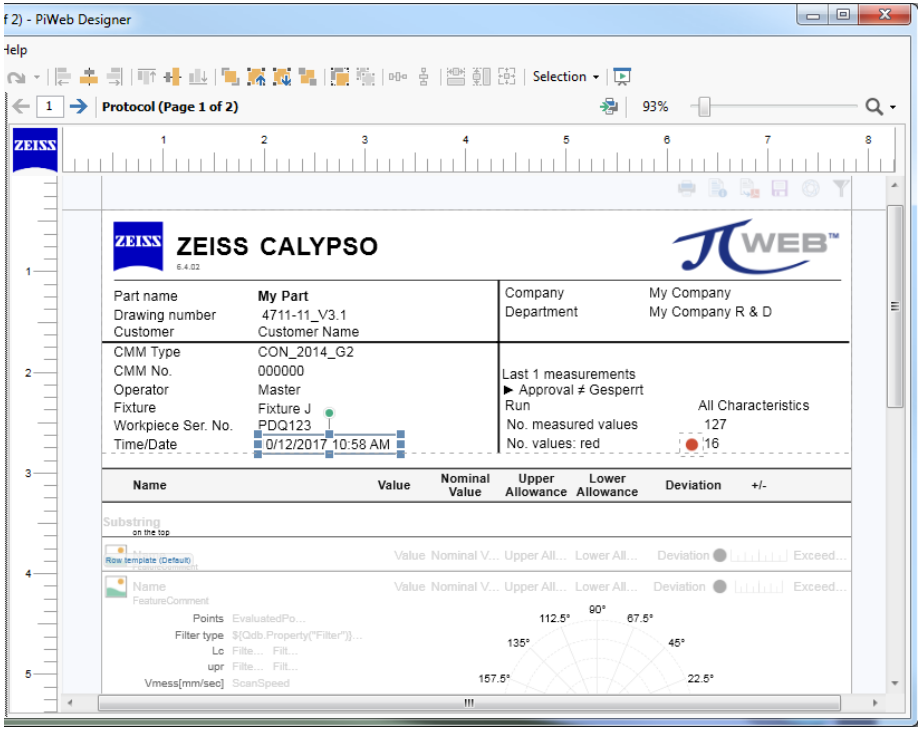




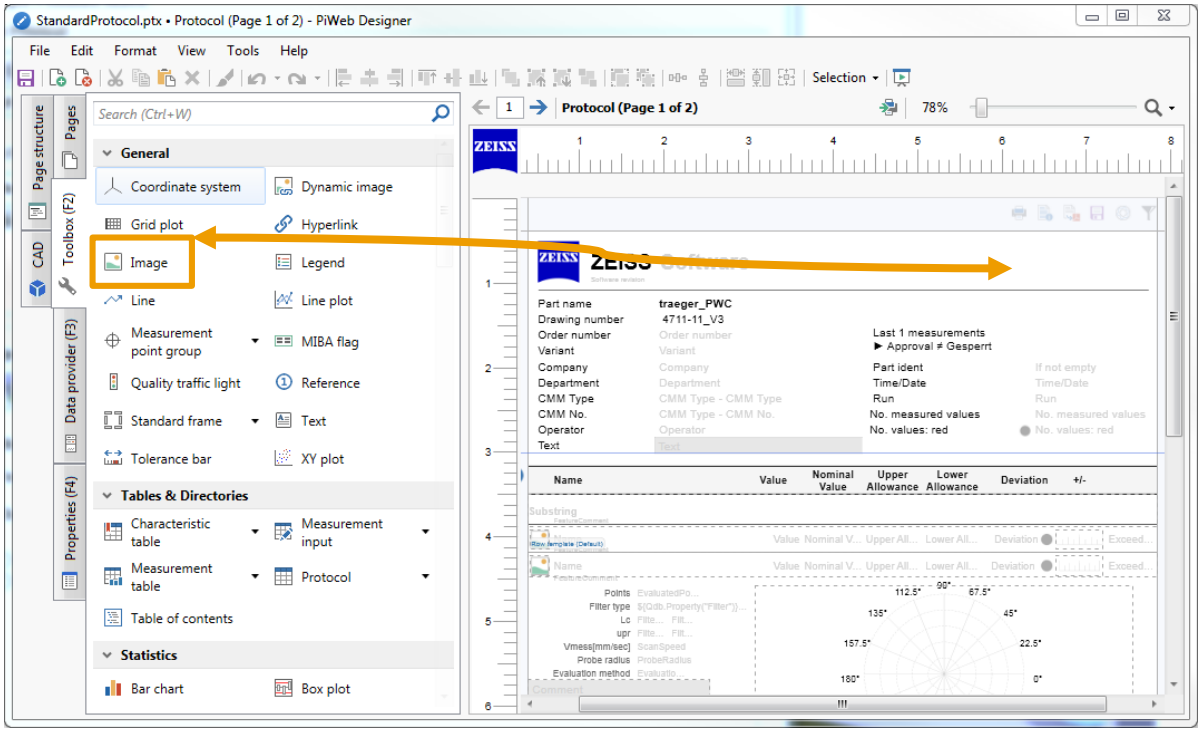
Sometimes, the Zeiss header has unneccesary information. Or maybe, it's missing information that you need.

Customize your headers





Add your logo

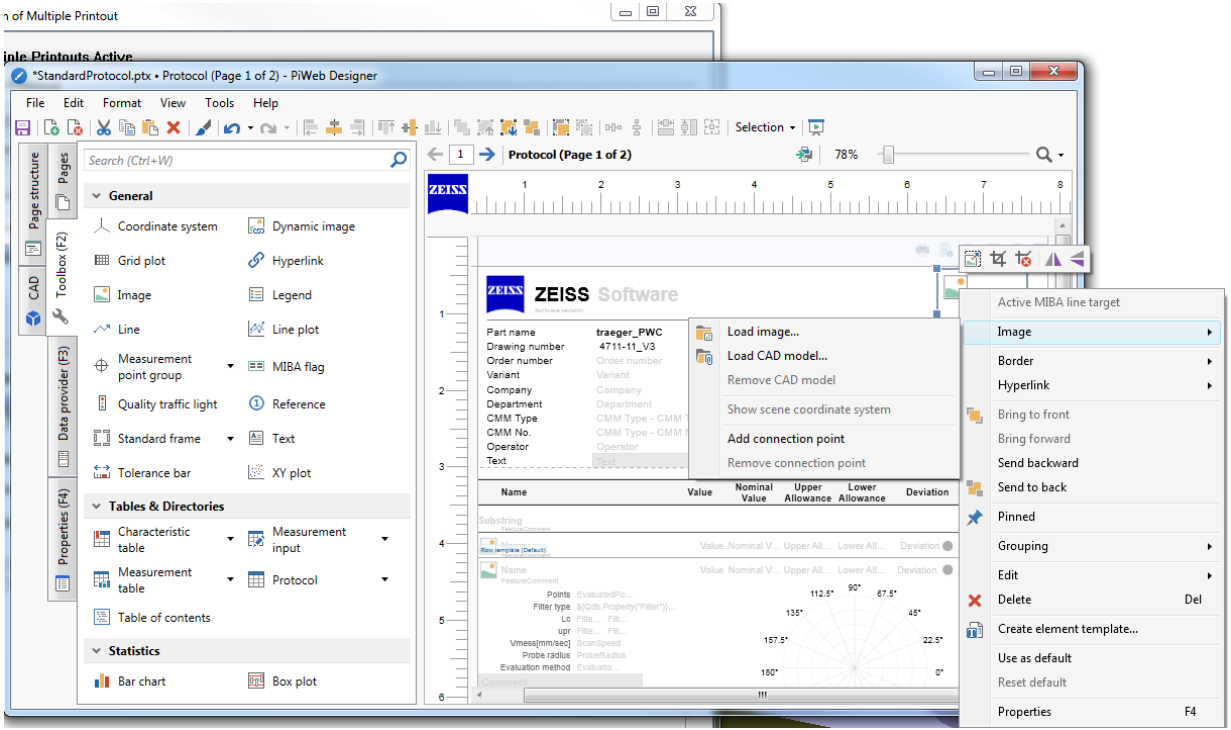


Drag an Image in from the toolbox and place it where you want it.

You MUST place it in the header.

If it gets inserted below the header you cannot just move it up into the header.

Add your logo



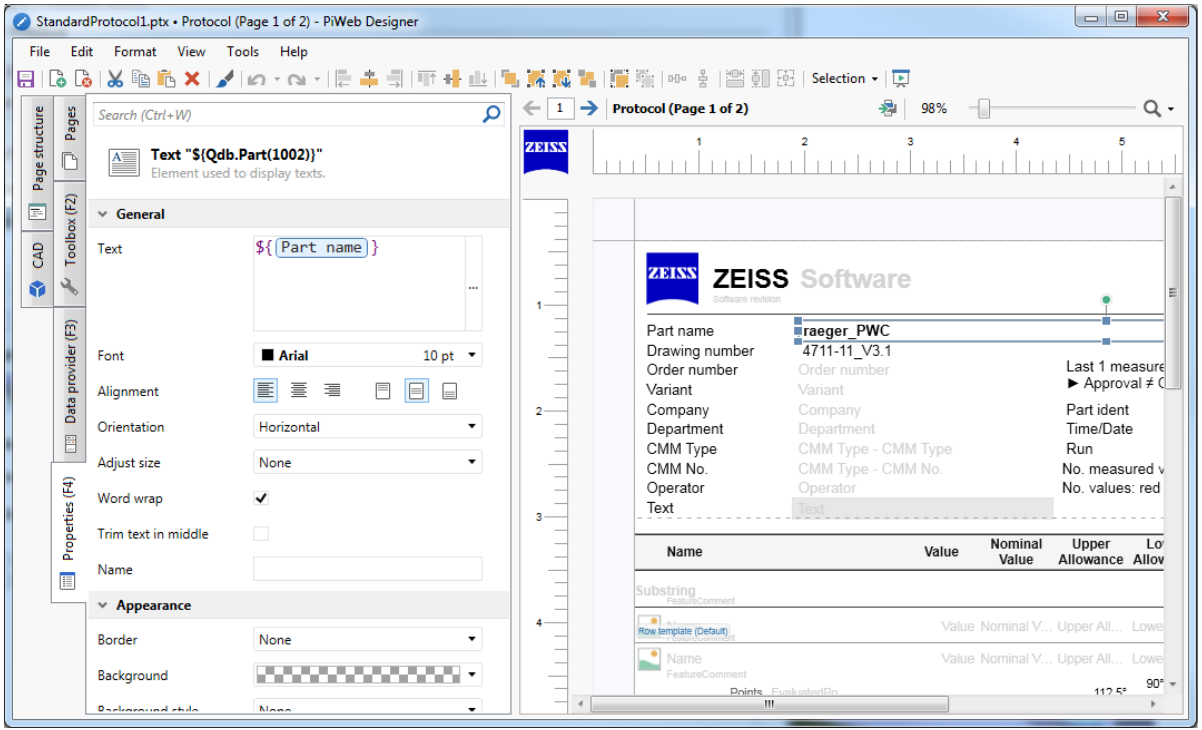
Right click, go to image, Load image…

From there you can navigate to your saved company logo.

When it loads, resize it by clicking on the corners and move it by clicking and dragging.

Click the floppy disk to save the template.

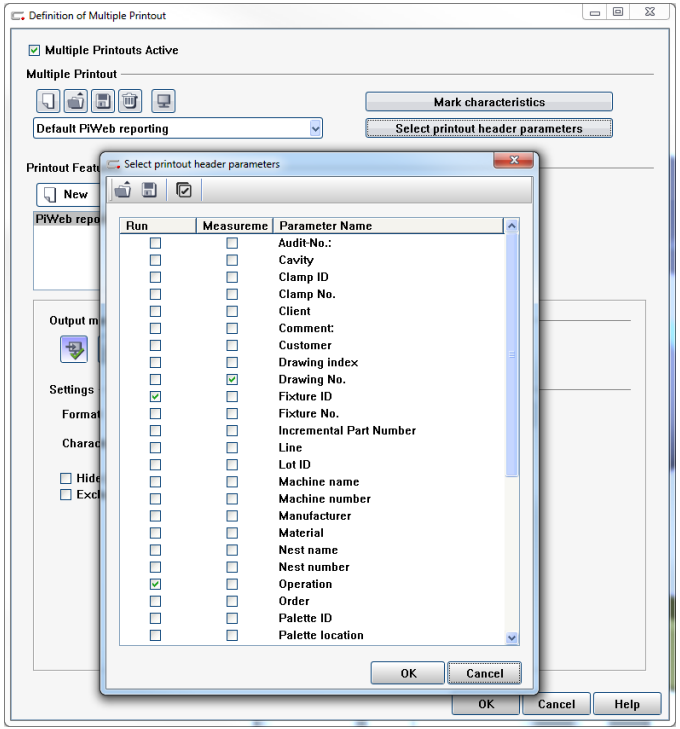
Change Header Parameters



The current Part name is pulling the name of the measurement plan.

Many times measurement plans are named after the part, but if that's not the case, we can pull from our header parameter that we input in Calypso.

Change Header Parameters



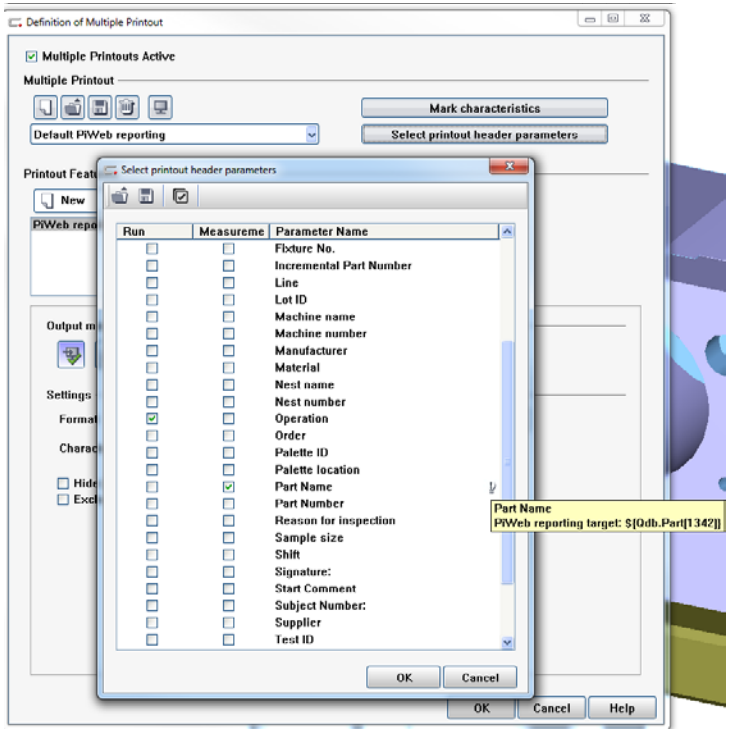
Earlier, we set up Calypso with printout header parameters. We specifically used 6 header parameters.

Part Name
Drawing No.
Customer

Fixture ID
Operation
Workpiece Ser. No.

Now, we need to get these on the report.

Change Header Parameters



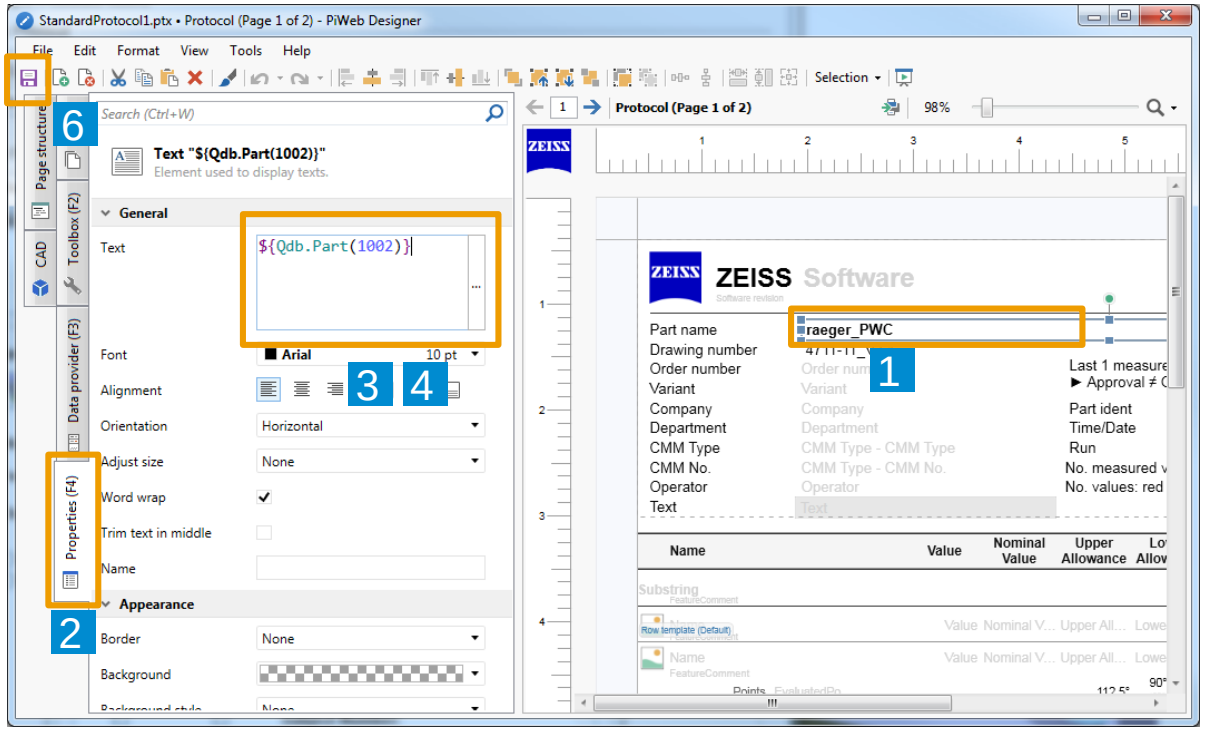
*Make sure you have bubble help checked on. In Calypso, go to the ? There should be a check next to bubble help.

Scroll down to Part Name and place your mouse over the far right side.

You should see a yellow pop-up that says Part name and has the PiWeb reporting target ${Qdb.Part(1342)}

This code has to be copied exactly into PiWeb

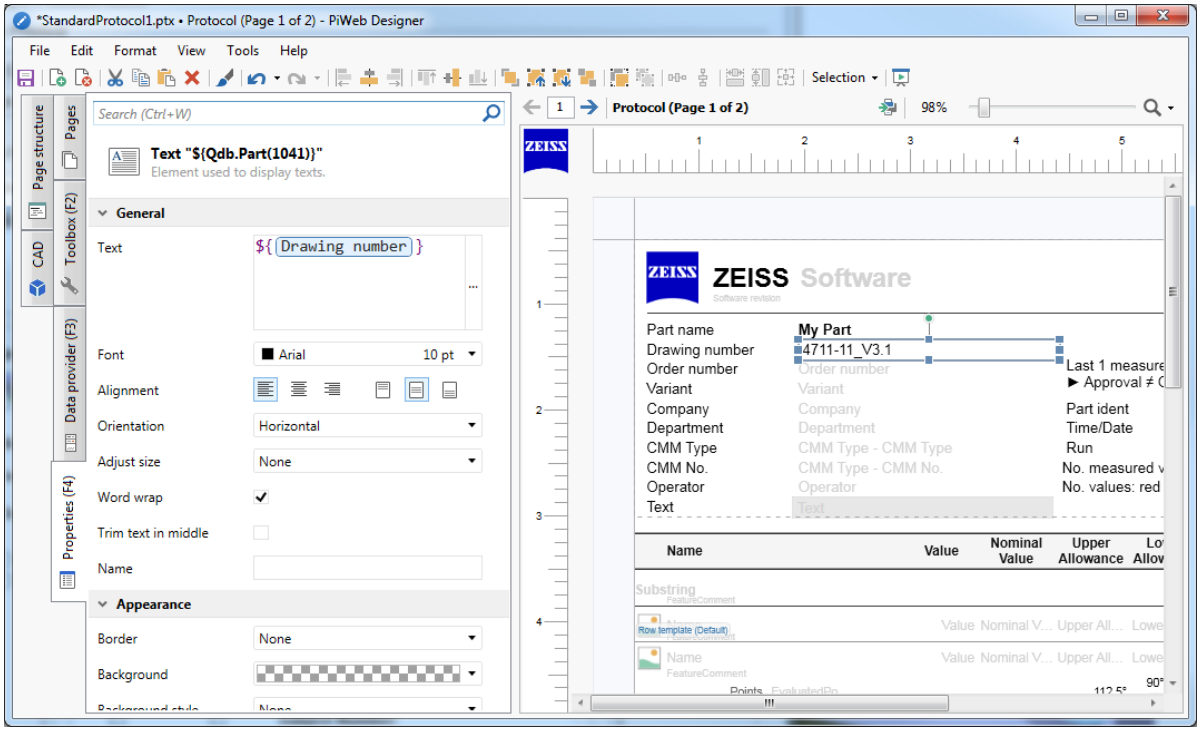
Change Header Parameters



In PiWeb Designer:

1. Click on the text element for the part name.
2. Click on the Properties Tab
3. Click in the Text Box
4. Type the PiWeb Reporting target code ${Qdb.Part(1342)}
5. Press F5 to refresh the page
6. Save the template.

Change Header Parameters

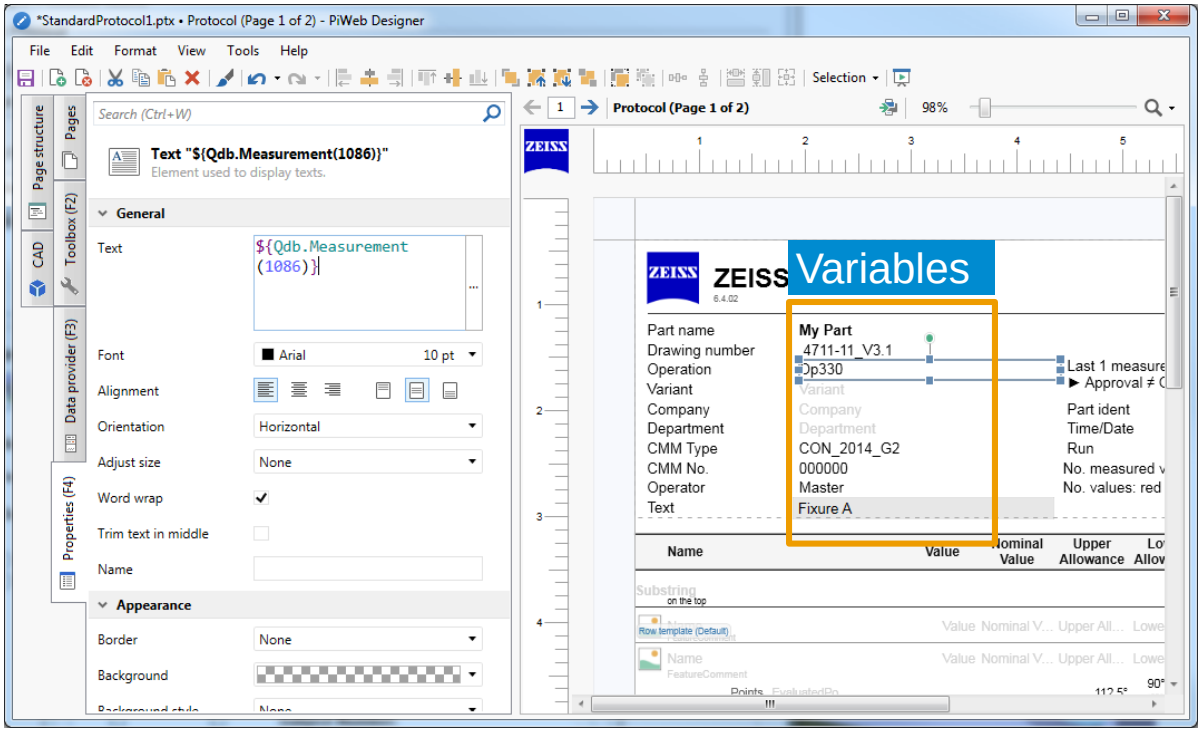


Part Name now comes in from the header parameters.

Drawing number is already coming in.

We don't need Order number or Variant so we can use them for our other variables.

Change Header Parameters



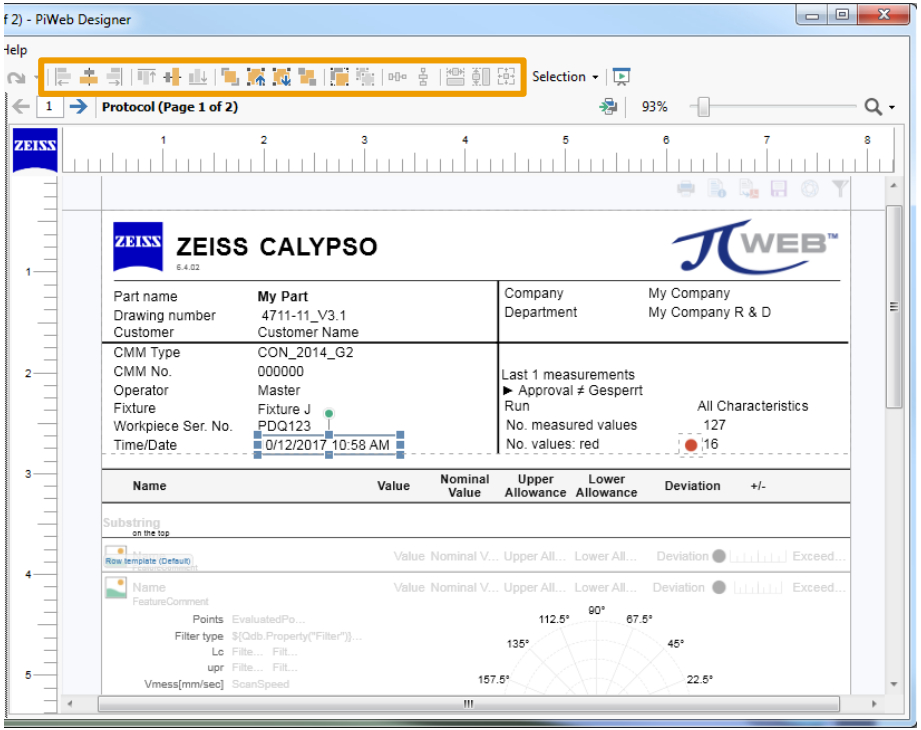
Double click on Order and type Operation.

Then change the text in the variable to ${Qdb.Measurement(1086)}

Click F5 to update the screen. And save the report

*Variables are the elements that change depending on what you enter in Calypso.

Change Header Parameters



In the same way change and delete header fields.

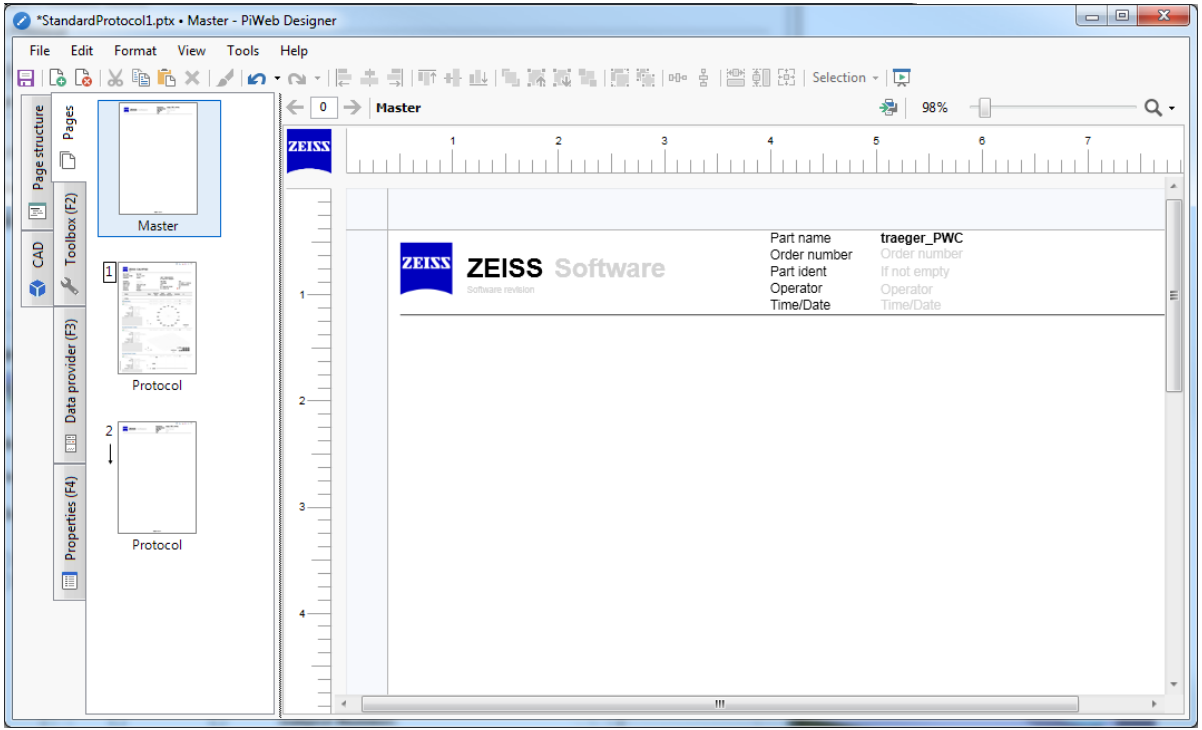
Use ctrl. + click to highlight multiple elements.

You can also click and drag to highlight multiple elements.

Use the alignment tools at the top to organize.

Drag in line elements from the toolbox to separate chunks of information.

Change Header Parameters



Remember, some reports have a different first page.

This report is one of those.

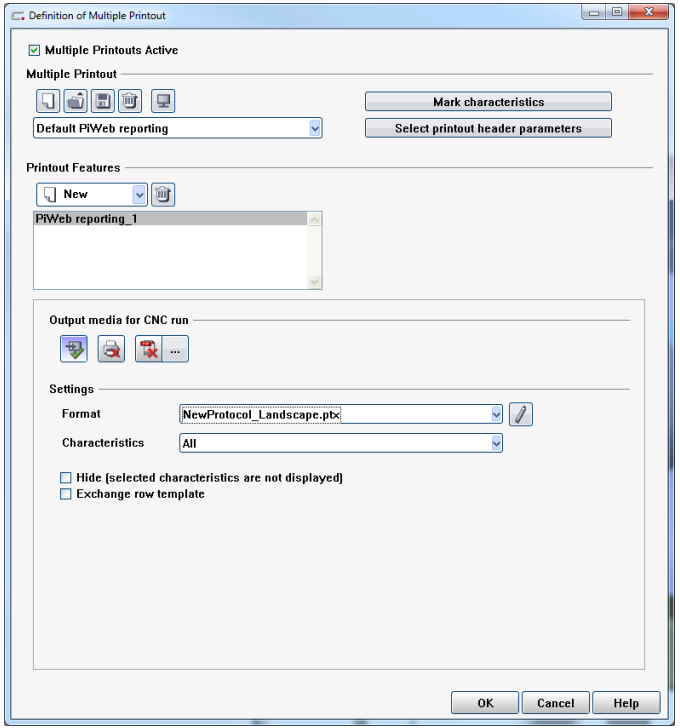
We also need to go to the Master Page and fix the header there.

Then, this report will be ready to go. Remember to SAVE.

Creating Plots

Section 3

Plots in Designer

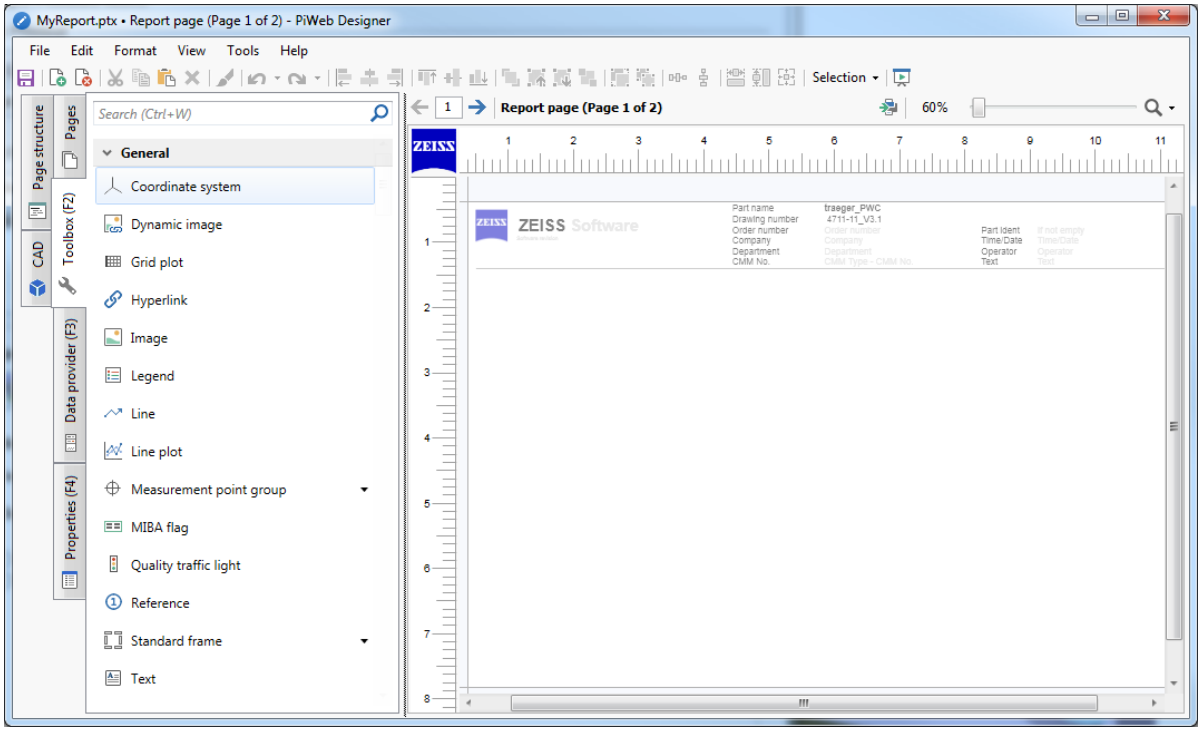


Go to Multiple Printouts.
Select New Protocol_Landscape
Click the Pencil to open Designer

This one will be saved as a Measurement Plan Specific Template.

Measurement Plan Specific Reports are saved in a PiWeb Reporting Templates folder in the Measurement Plan Folder. Workarea→Inspections→Named Measurement Plan →PiWeb Reporting Templates.

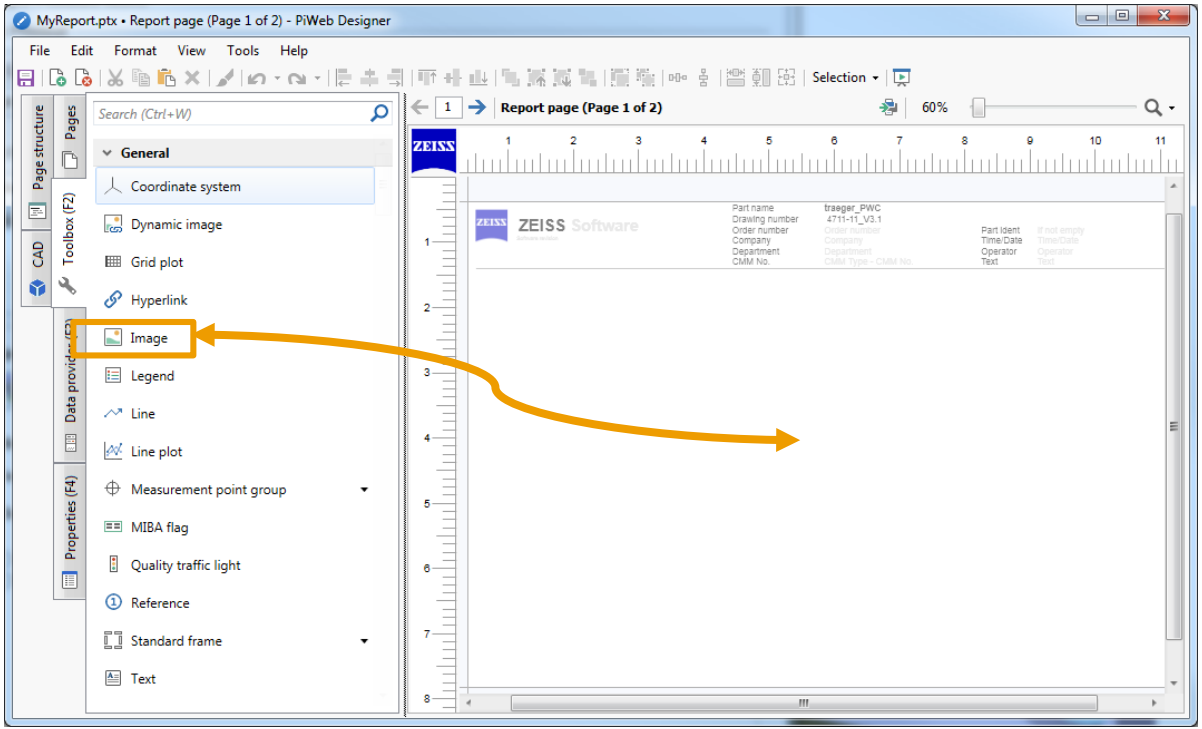
Plots in Designer



Designer opens with a blank page, that has only the header.

You cannot edit the header on this page, you need to go to the Master Page.

Plots in Designer

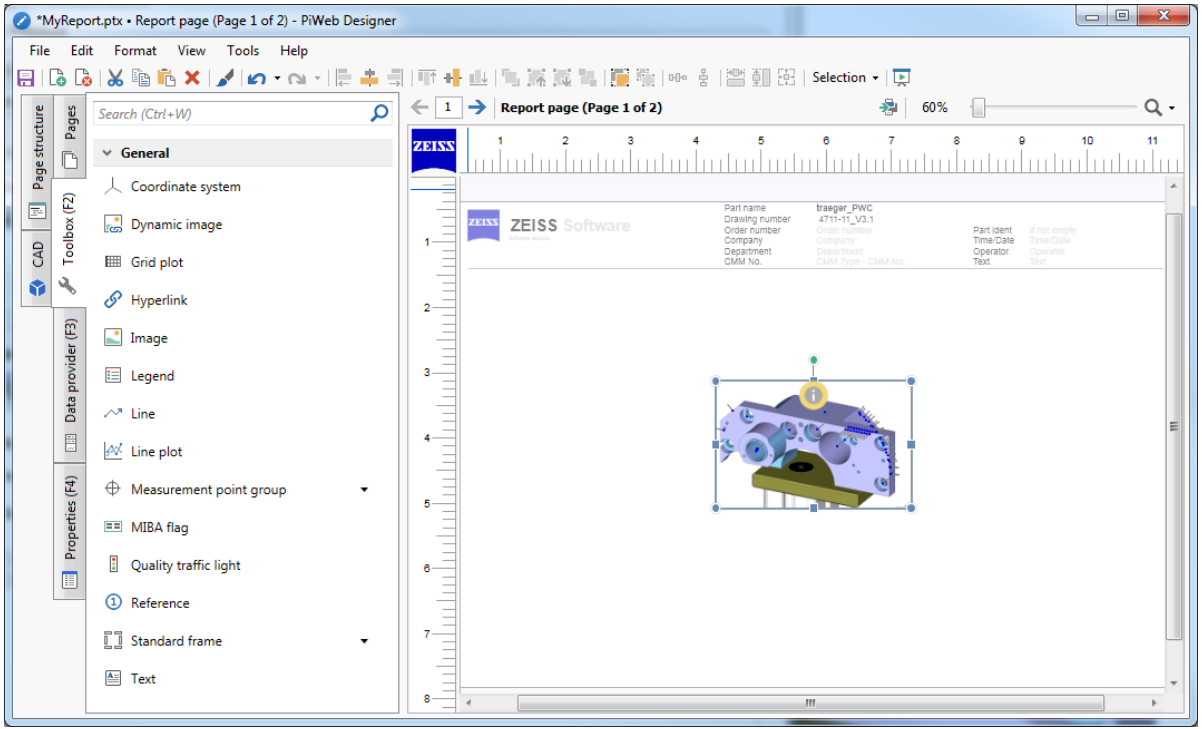


First I'm going to drag an image of my part in.

I have saved this image in a folder in the inspection plan, but it can be saved wherever is convenient.

.jpg files work best for this application.

Plots in Designer – MIBA Images

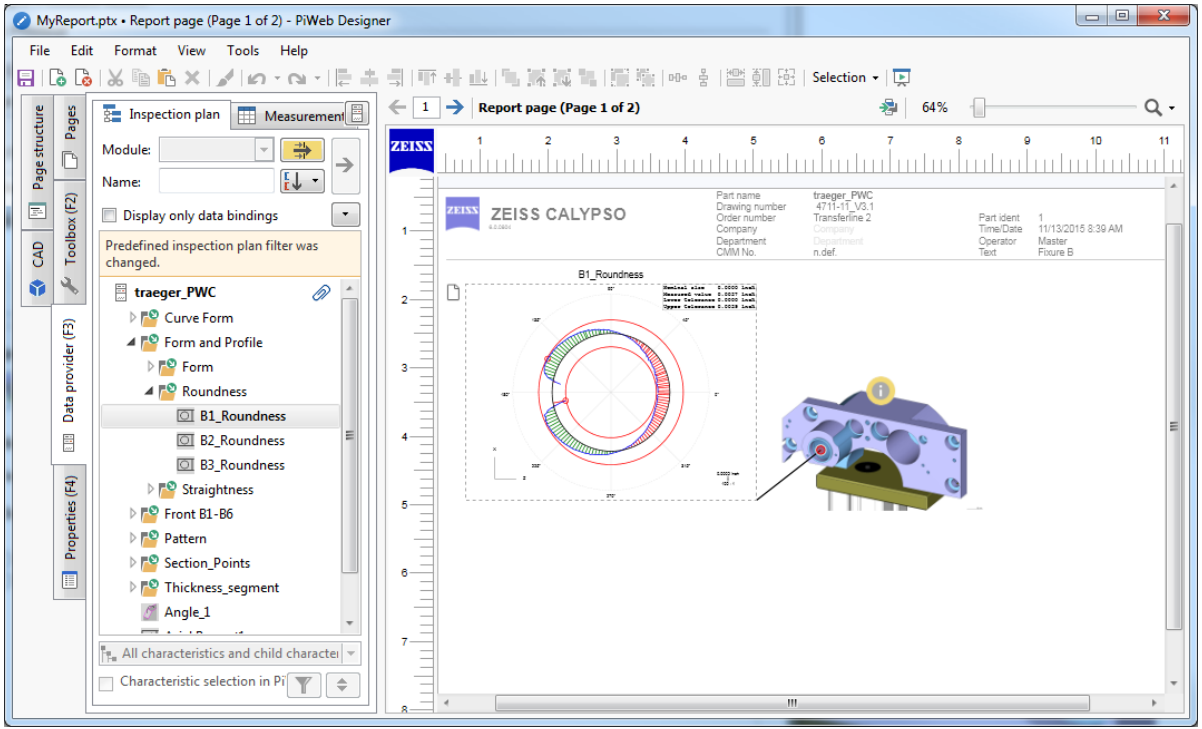


This is called a MIBA image.

They can be created by saving a view out from Calypso.
CAD→View→Save View to File *Save as a .jpg

MIBA Generator can create them as well. Go to the start menu and type MIBA to see if you have it.

Plots in Designer – Example 1

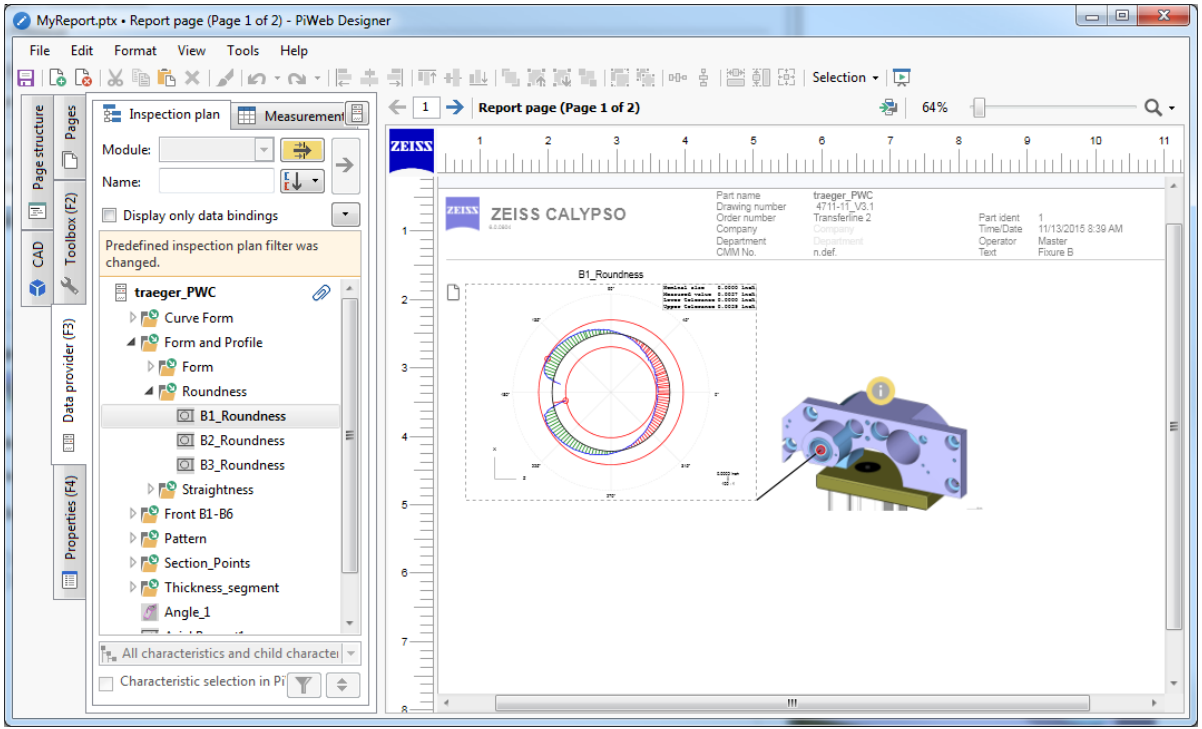


I want to add a roundness plot for a hole.

1. Go to the toolbox
2. Drag in a roundness
3. Go to the Data provider
4. Check the box for B1_Roundness
5. Press F5

*Notice that the plot is linked to the feature on the image.

Plots in Designer

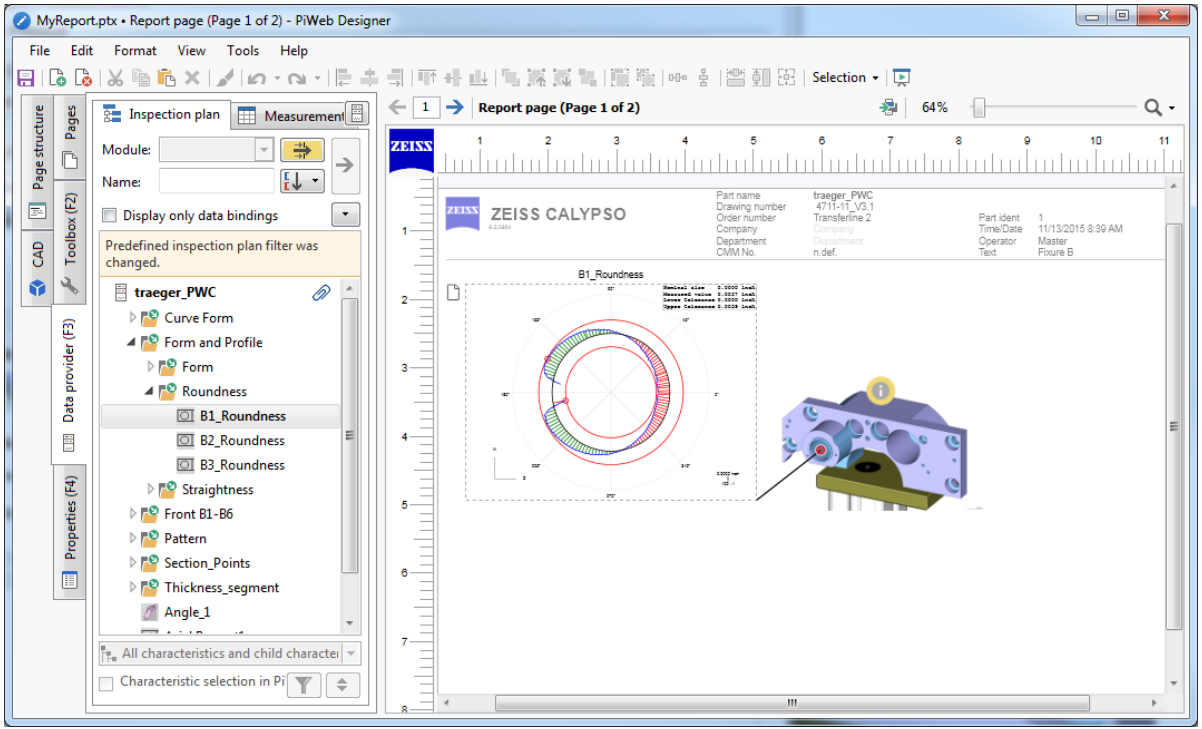


Many element follow similar steps.

1. Find the element in the toolbox,
2. Drag the element onto the report.
3. Assign the characteristic(s)
4. Adjust the properties
5. Preview.

*Preview with F5 or F11

Plots in Designer

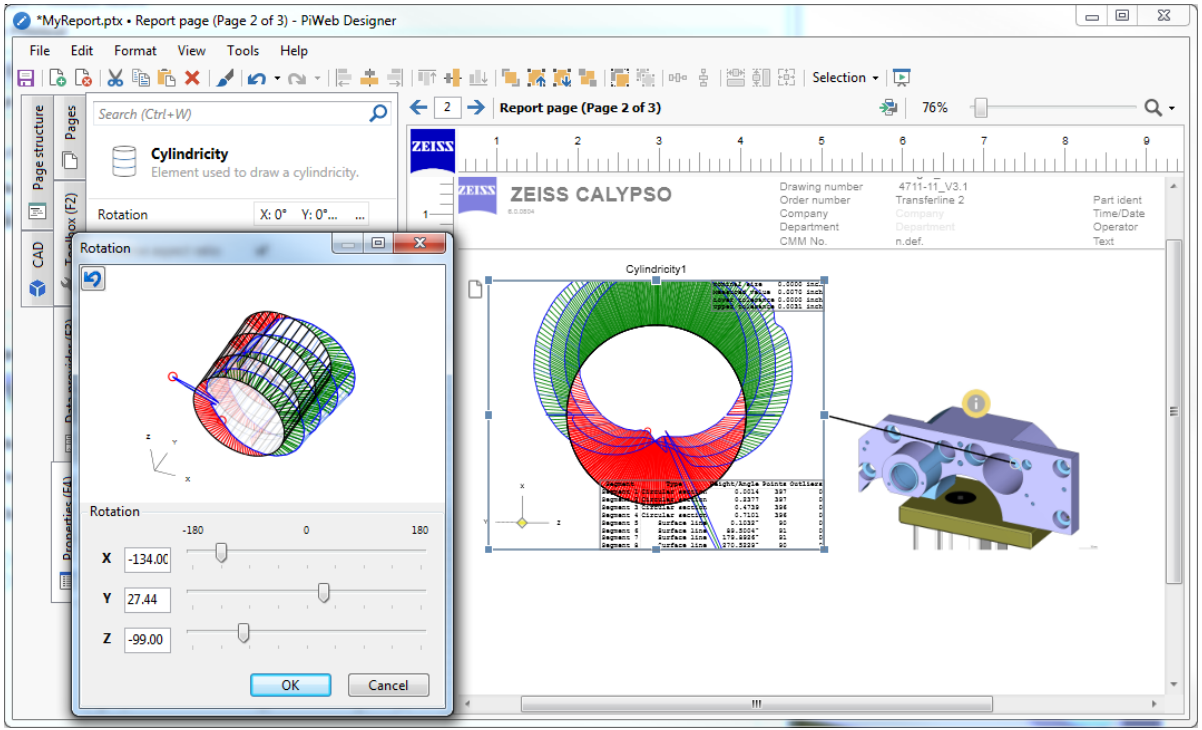


The properties of this plot can change many things.

Important points in the properties of a form plot:

- Automatic Magnification
- Peak representation
- Tolerance Usage
- Connection Line
- Borders, Background, Font, etc.
- Tables, scale, coordinate system

Plots in Designer – Example 2

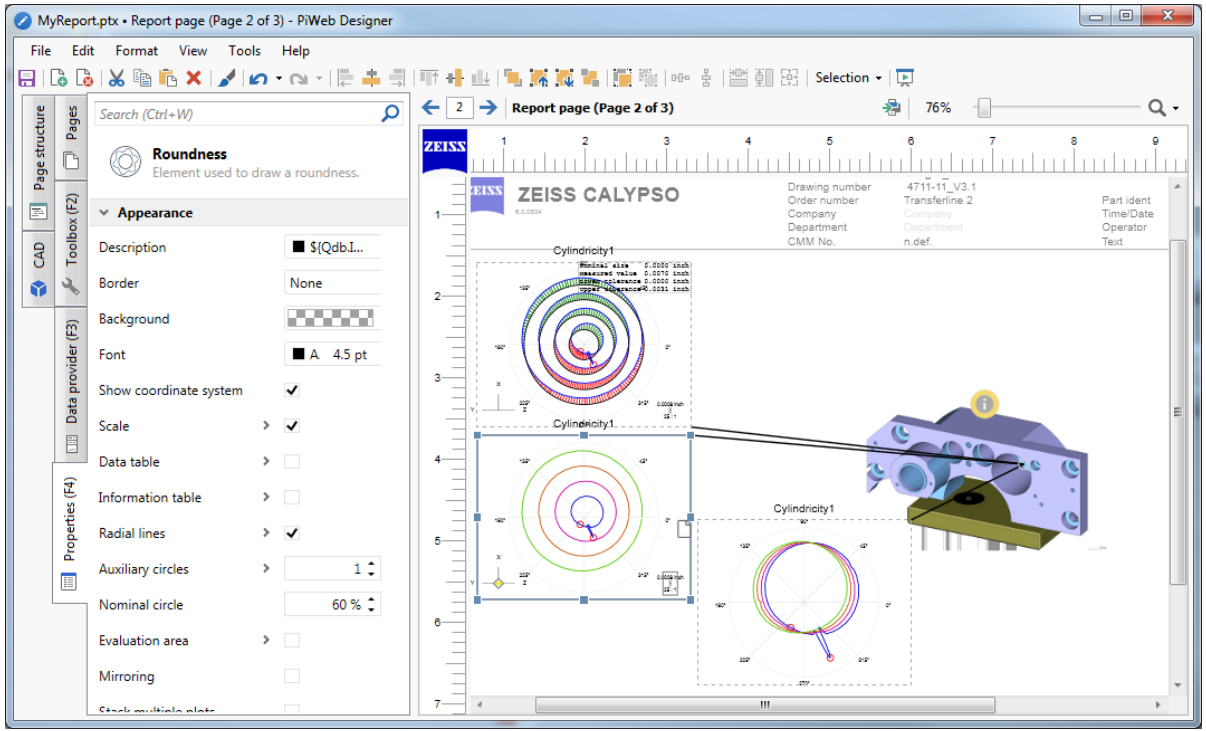


Create a Cylindricity.
By default it loads all the data on top of each other.

Go to properties, rotation, and rotate the plot.

*You cannot rotate freely in Monitor. You can only rotate around the cylinder axis.

Plots in Designer – Example 3



Create a roundness.

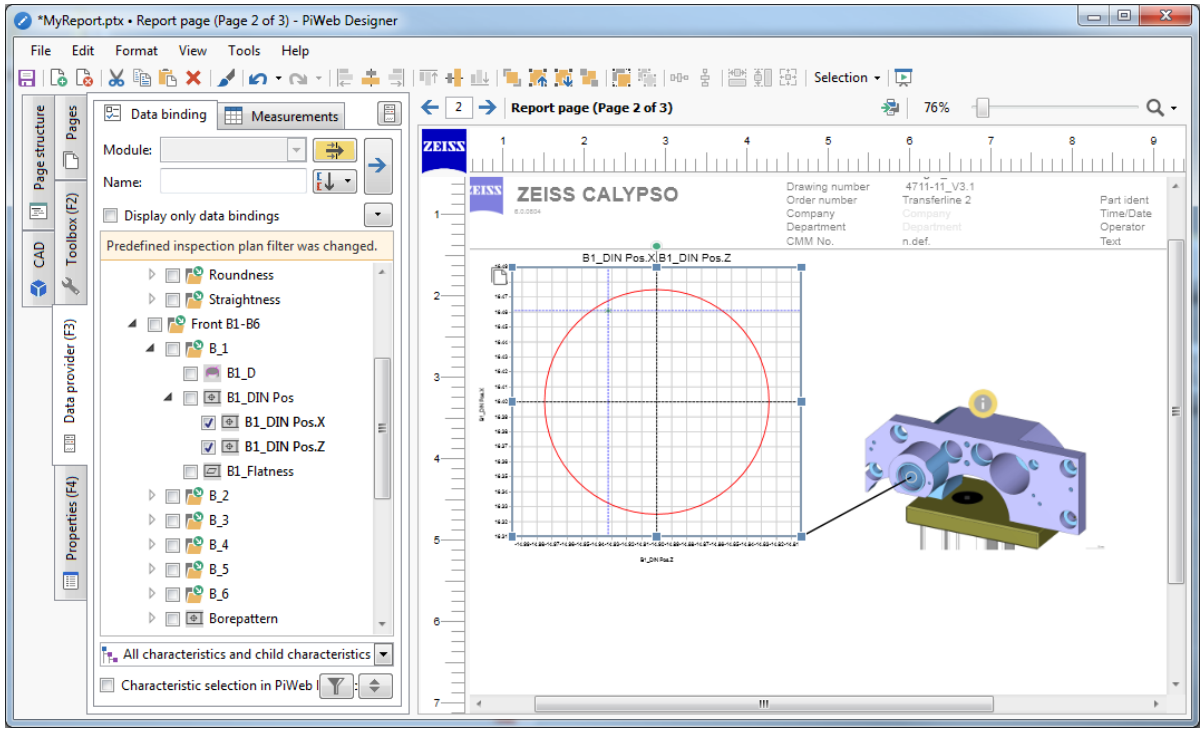
Choose cylindricity for the dataprovider.

Copy and paste that plot.

Plot 2: No peaks, connection line color scheme = per segment, No tolerance, No nominal

Plot 3 = Plot 2, but stack multiple plots

Plots in Designer – Example 4



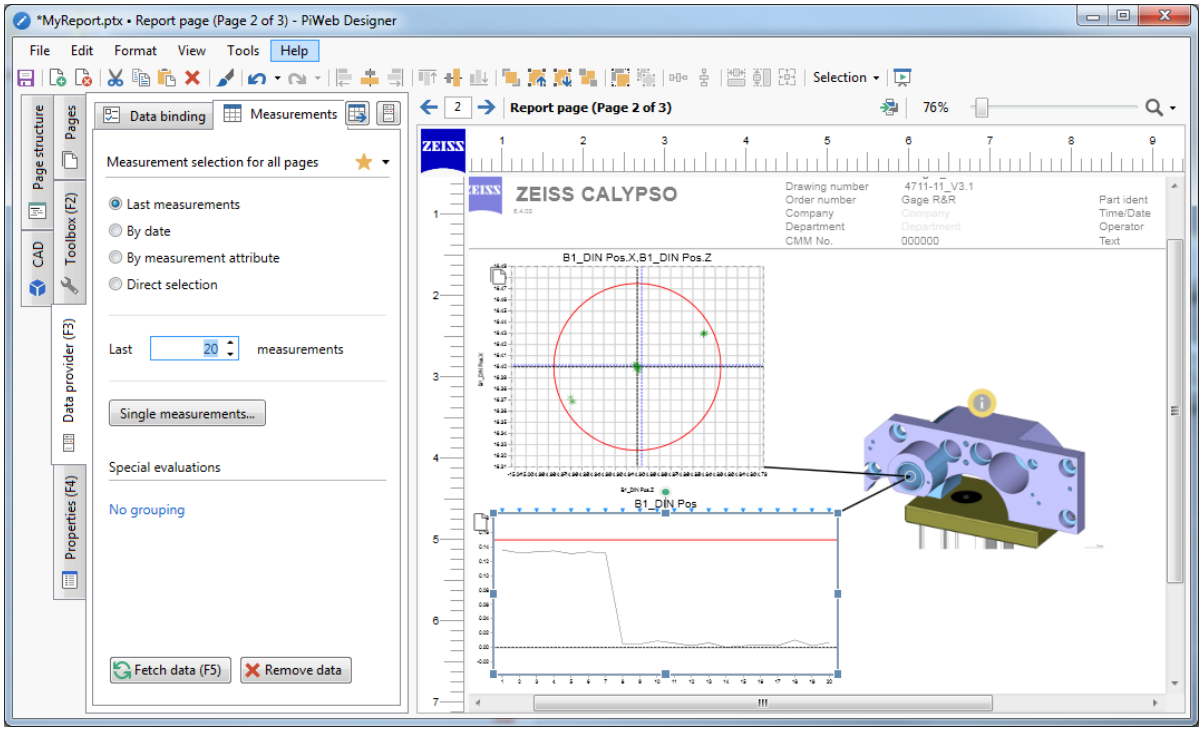
Drag in an XY Plot

Data Bind to Pos.x and Pos.y

This creates a target plot that shows where a hole or pin is located relative to where it should be.

*Additional printout data must be turned on in Calypso, prior to running.

Plots in Designer – Example 4



Add a line plot.

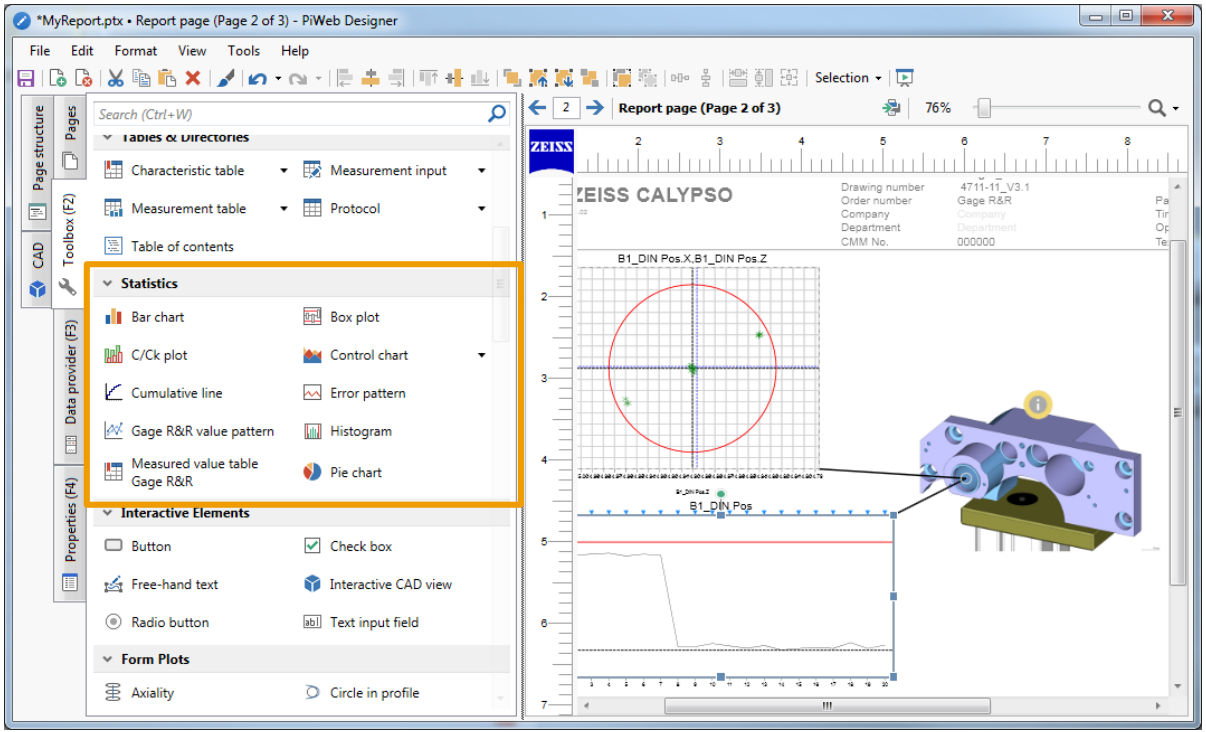
Data bind to the Pos characteristic. (not .x .y)

Go to the Measurement Tab and change to the last 20 measurements

Press F5

The last 20 positions show on the target plot and in the run chart.

Designer – Statistics

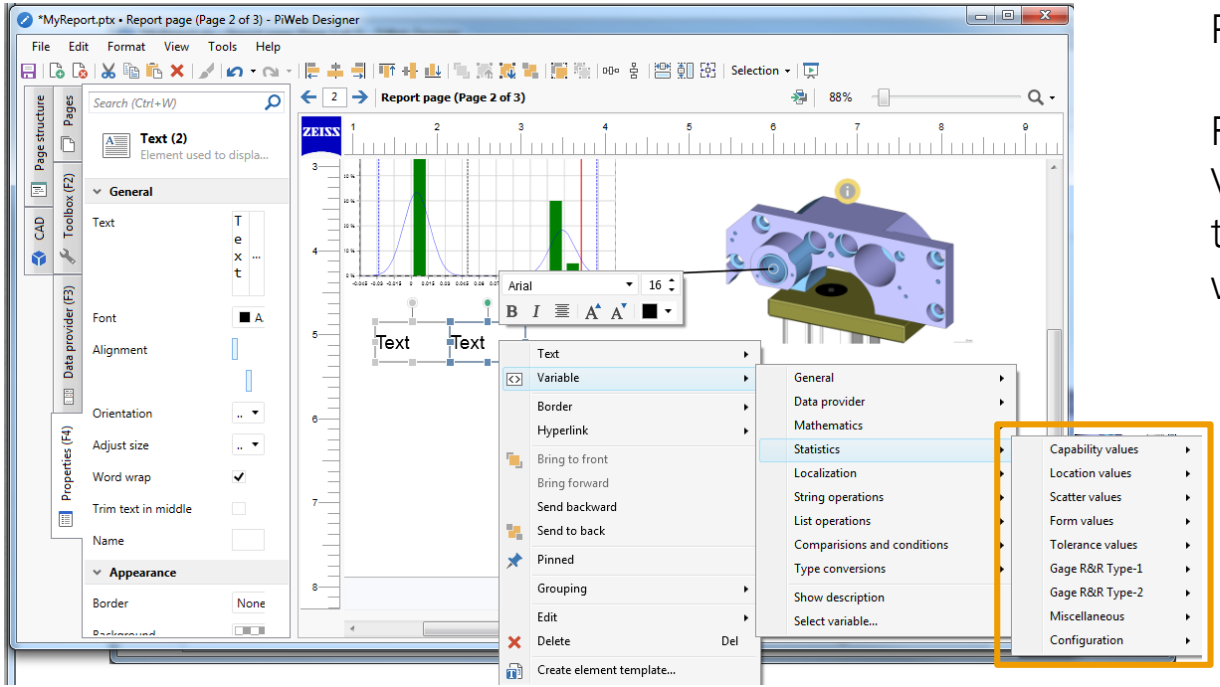


PiWeb Plus has the additional benefit of statistical capabilities.

In the toolbox you can find a number of statistical plots and charts.

Additional statistical values are available through the use of text elements.

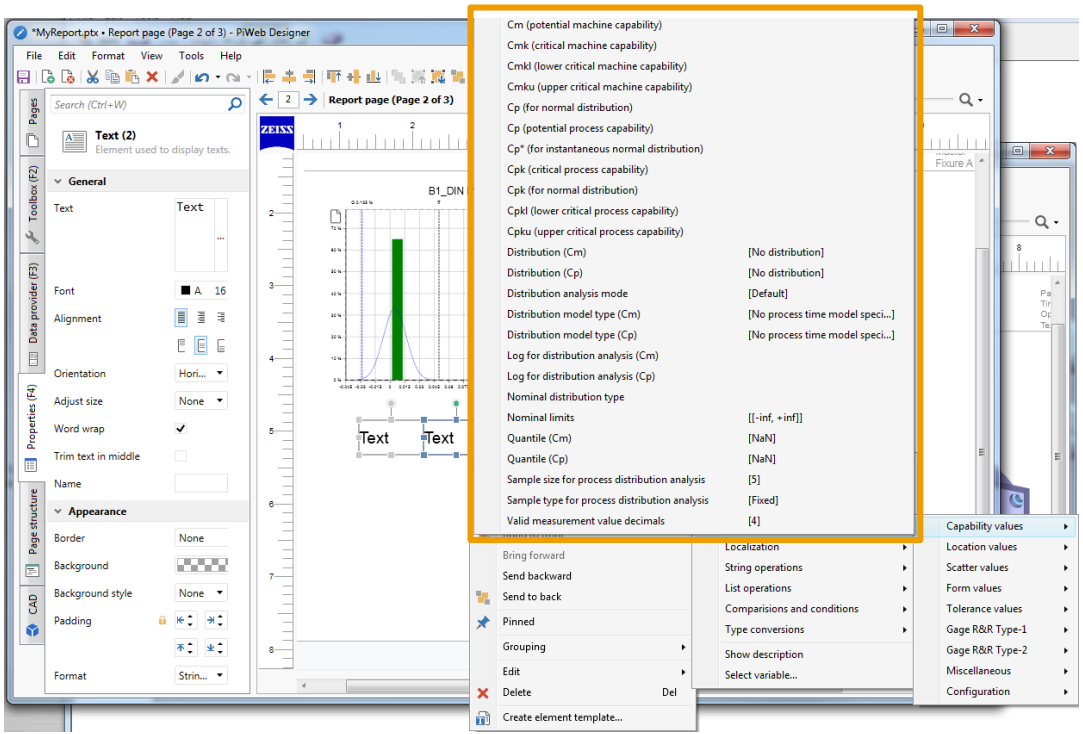
Designer – Statistics



Pull in a text element

Right click go to: Variable→Statistics→Choose the type of statistic you would like.

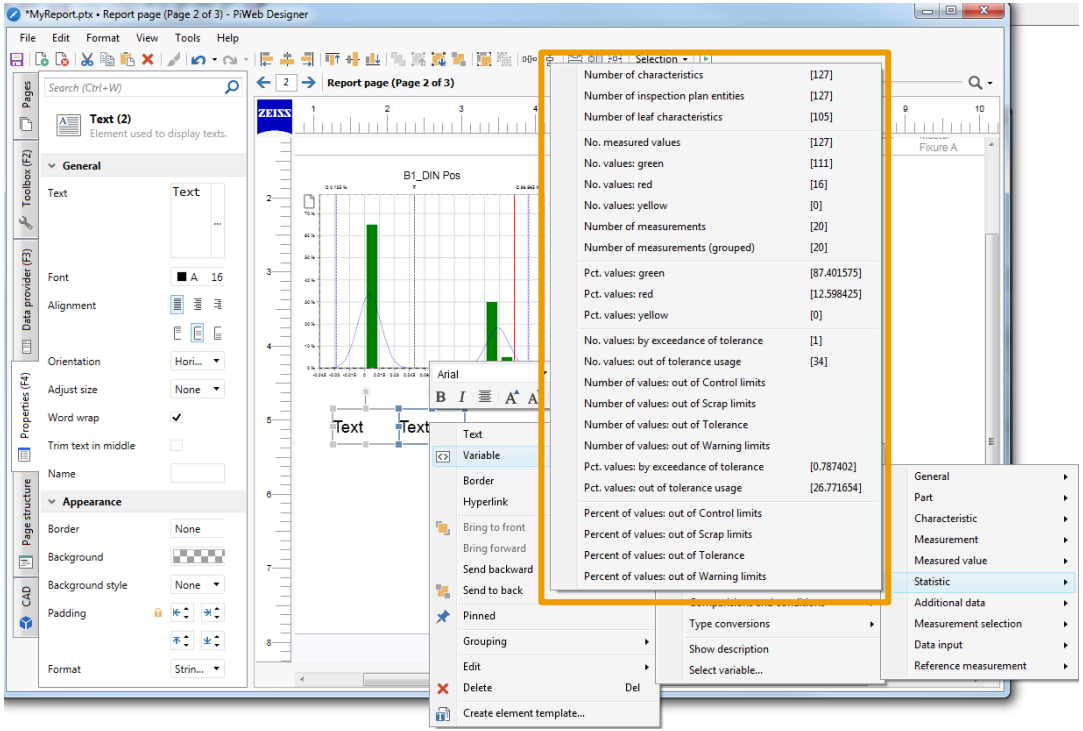
Designer – Statistics



This is just capability values. There are 8 other types of statistical menus to choose from.

Remember to data bind the text element. This is most common oversight in template creation.

Designer – Statistics



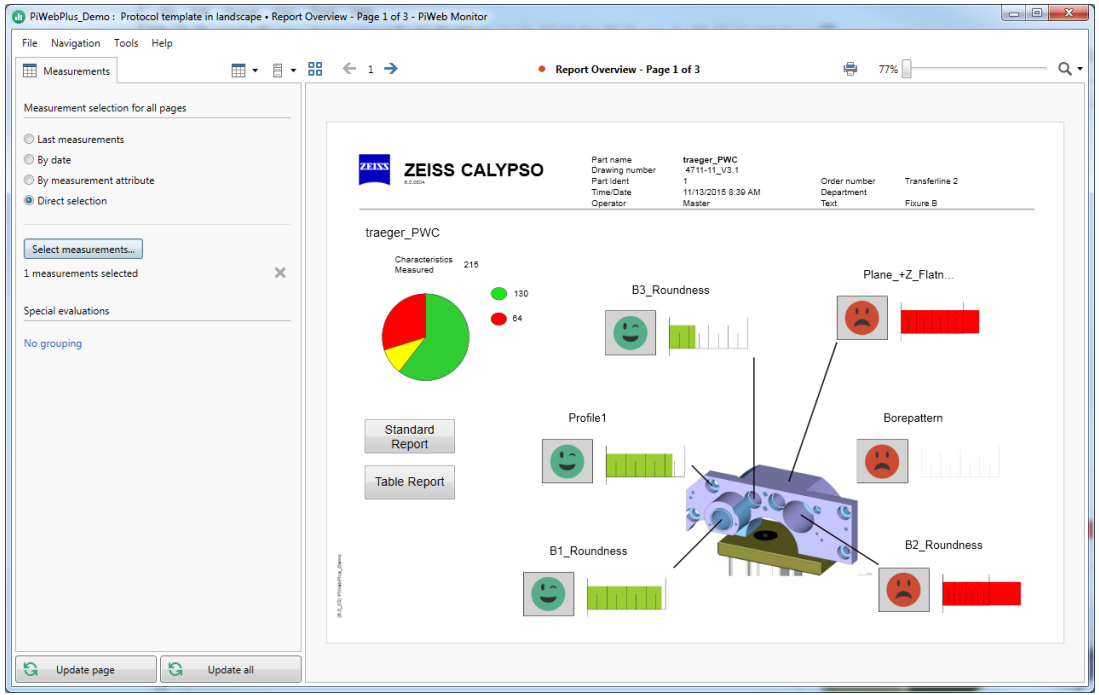
There is a wide variety of options when you use a text box and make it a variable in this manner.

You can display characteristic values like actual, nominal, tolerance, name.

You can calculate equations.

You can calculate statistics for the run(s) that are data bound.

Custom Reports



PiWeb Designer allows you to create the reports you need.

Ideas:

- A one page inspection summary.
- A condensed report to save on printing costs.
- A report to meet a standard, like AS9102, or to meet a customer's requirements.
- Production Reports

What would you like to see?

Content Review

In this module you have learned…

1

Open and navigate PiWeb Designer

2

Customize the headers on Zeiss Templates

3

Create reports with form plots and line charts.