



Customizing PiWeb Header



PiWeb has the ability to add additional information to the Header that may be required or desired.

This guide will go through the steps to create variables (like **Job Number** and **Shift Manufactured**), add the variables created to the Header, and will go over some of the steps to modified the Header (like adding a company logo).

With PiWeb the possibilities are almost endless!

Default Header																				
<table border="1"> <thead> <tr> <th>Name</th> <th>Measured value</th> <th>Nominal value</th> <th>+Tol</th> <th>-Tol</th> <th>Deviation</th> <th>+/-</th> </tr> </thead> <tbody> <tr> <td>01 Flatness of Datum A D3</td> <td>0.0045</td> <td>0.0000</td> <td>0.0500</td> <td>0.0000</td> <td>0.0045</td> <td></td> </tr> </tbody> </table>							Name	Measured value	Nominal value	+Tol	-Tol	Deviation	+/-	01 Flatness of Datum A D3	0.0045	0.0000	0.0500	0.0000	0.0045	
Name	Measured value	Nominal value	+Tol	-Tol	Deviation	+/-														
01 Flatness of Datum A D3	0.0045	0.0000	0.0500	0.0000	0.0045															

Modified Header Example																				
<table border="1"> <thead> <tr> <th>Name</th> <th>Measured...</th> <th>Nominal...</th> <th>+Tol</th> <th>-Tol</th> <th>Deviation</th> <th>+/-</th> </tr> </thead> <tbody> <tr> <td>01 Flatness of Datum A D3</td> <td>0.0045</td> <td>0.0000</td> <td>0.0500</td> <td>0.0000</td> <td>0.0045</td> <td></td> </tr> </tbody> </table>							Name	Measured...	Nominal...	+Tol	-Tol	Deviation	+/-	01 Flatness of Datum A D3	0.0045	0.0000	0.0500	0.0000	0.0045	
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01 Flatness of Datum A D3	0.0045	0.0000	0.0500	0.0000	0.0045															

Creating Variables:

Before modifying the Header, the variables need to be created, for this guide we will be creating the following Variables: **Job Number**, **Shift Manufactured**, **QC Inspector**, and **Programmer**.

Start by selecting Create New Measurement Plan, or open an existing program. The path to create the Variables is **Resources/Design Custom Printout/Editor for User-Defined Printout Header Variables**.

This opens the UserFields Editor, right click in the left window and select **Add Variable**, repeat 3 more times for a total of 4 variables (0, 1, 2, and 3).

UserFields Editor: Properties Overview

Key	Value

Allow Editing when editing the inspection plan; allows editing of the variable inside the program.

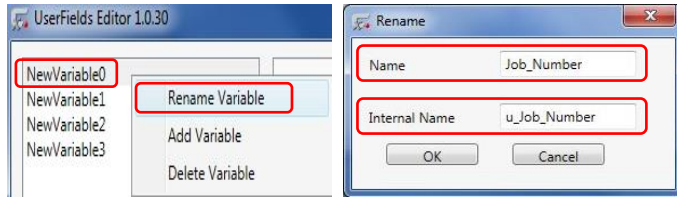
Allow Editing upon CNC start; allows editing of the variable at the start of a run.

Allow Entering values by keyboard; allows editing of the variable using a Keyboard.

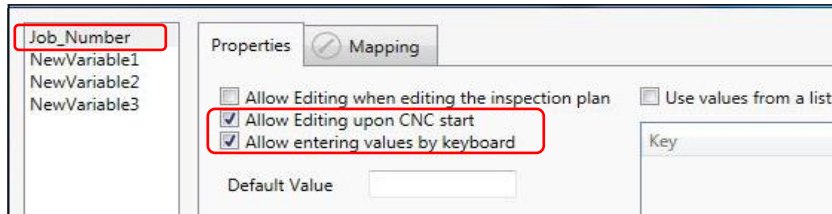
Use values from a List; allows the variable to be selected from a list with the mouse.

Job Number (NewVariable0): Keyboard Entry at CNC Start

The goal is to make **Job Number** a Keyboard Entry at CNC Start (Operator uses keyboard to type in the Job Number at the start of the run).



Right click on NewVariable0 and select **Rename Variable**, in the **Name** area enter **Job_Number**, then in the **Internal Name** area enter **u_Job_Number** and select **OK**. Since this is “code” stay away from special characters and even spaces (“_” is allowed).

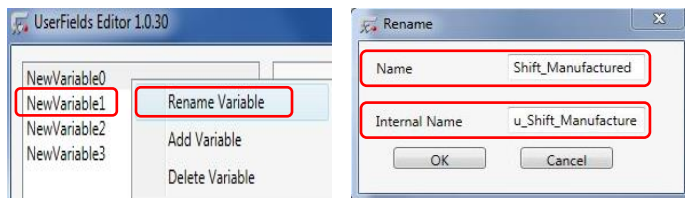


In the UserFields Editor window select the following:

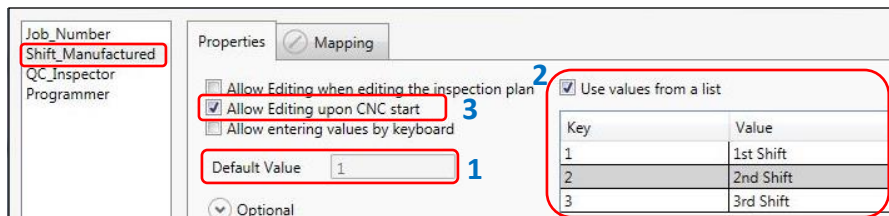
- Allow Editing upon CNC start**
- Allow Entering values by keyboard**

Shift Manufactured (NewVariable1): List drop down, NO Keyboard Entry at CNC Start

The goal is to make **Shift Manufactured** a drop down box with **NO** Keyboard Entry at CNC Start, using 1st Shift as the default value of the list. (Operator uses mouse and selects the Shift Manufactured from the drop down list at the start of the run).



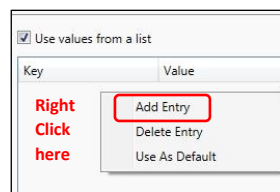
Right click on NewVariable1 and select **Rename Variable**, in the **Name** area enter **Shift_Manufactured**, then in the **Internal Name** area enter **u_Shift_Manufactured** and select **OK**. Since this is “code” stay away from special characters and even spaces (“_” is allowed).



In the UserFields Editor window select the following, **in this order**:

- 1 - Default Value type in 1**
- 2 - Use values from a list**
- 3 - Allow Editing upon CNC start**

Creating the List:

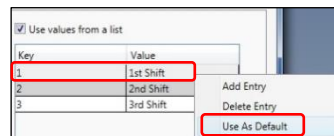


To create the list, right click in the window under **Key | Value** and select **Add Entry**, repeat this step 2 more times for a total of 3 entries.

First: new_Key type in **1** and for new_Value type in **1st Shift**.

Second: new_Key type in **2** and for new_Value type in **2nd Shift**.

Third: new_Key type in **3** and for new_Value type in **3rd Shift**



To make 1st Shift the default for PiWeb right click on 1st Shift and select **Use As Default**.

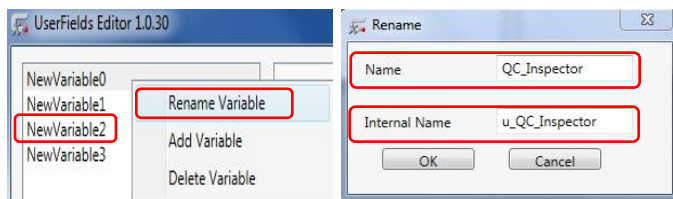
Key	Value
new_Key	new_Value
new_Key	new_Value
new_Key	new_Value

Key	Value
1	1st Shift
2	2nd Shift
3	3rd Shift

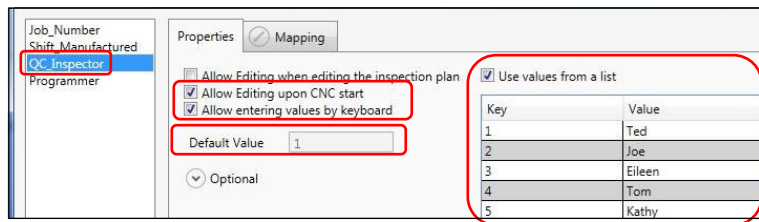
NOTE: To set the default value for a List in PiWeb right clicking and setting the default is required, the **Default Value** set to 1 in the UserFields Editor is for the non PiWeb reports.

QC Inspector (NewVariable2): List drop down, WITH Keyboard Entry at CNC Start ("Combo Box")

The goal is to make **QC Inspector** a drop down box with **WITH** Keyboard Entry at CNC Start, using one of the QC Inspectors as the default value of the list. (Operator uses mouse and selects the QC Inspector from the drop down list or uses the keyboard to type in the QC Inspector if they are not on the list at the start of the run).



Right click on NewVariable3 and select **Rename Variable**, in the **Name** area enter **QC_Inspector**, then in the **Internal Name** area enter **u_QC_Inspector** and select **OK**. Since this is "code" stay away from special characters and even spaces ("_" is allowed).



In the UserFields Editor window select the following:

Allow Editing upon CNC start

Allow Entering values by keyboard

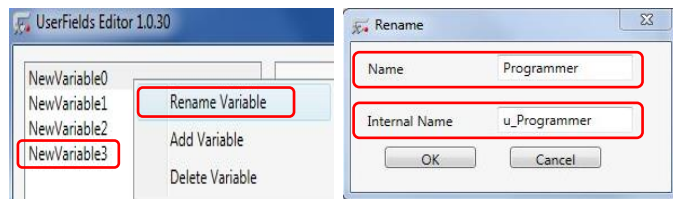
Use values from a list

Default Value type in 1

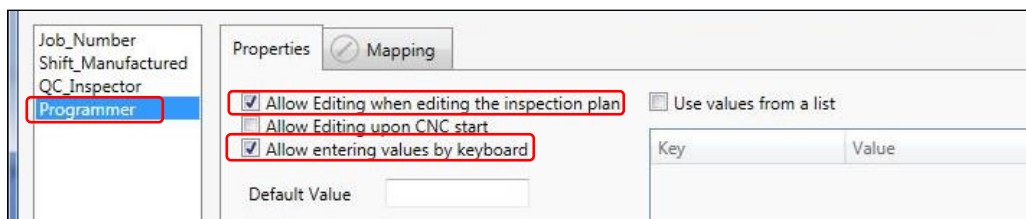
Create the list and set the default the same way as described in the Shift Manufactured section ([page 2](#)).

Programmer (NewVariable3): Keyboard Entry inside of the Inspection Plan

The goal is to make **Programmer** a Keyboard Entry inside of the Inspection Plan. (Programmer uses the keyboard to type in the Programmer's name inside of the program, operator does not perform this task).



Right click on NewVariable3 and select **Rename Variable**, in the **Name** area enter **Programmer**, then in the **Internal Name** area enter **u_Programmer** and select **OK**. Since this is "code" stay away from special characters and even spaces ("_" is allowed).

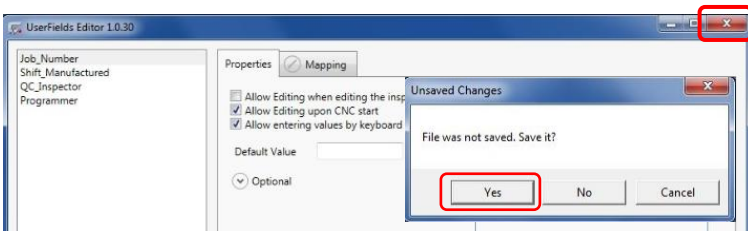


In the UserFields Editor window select the following:

Allow Editing when editing the inspection plan

Allow Entering values by keyboard

NOTE: Like setting the **Default Value** to 1 in the UserFields Editor, **Allow Editing upon CNC start** and **Allow Editing when editing the inspection plan** does not apply to the PiWeb report it only applies to non PiWeb reports.

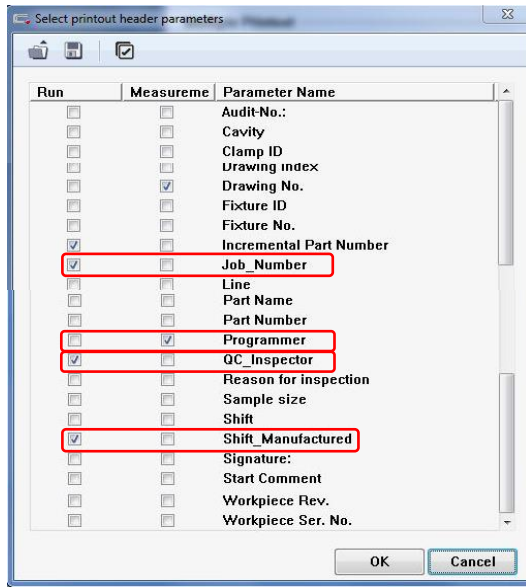


When finished creating the variables, close out the UserFields Editor window by selecting **X** in the upper right corner and selecting **Yes** to save the changes.

This updates or creates the **userfields** userfields.ini file in **C:/Users/Public/Public Documents/Zeiss/CAYLPSO/protocol/protform**.

Setting Allow Editing upon CNC start and Allow Editing when editing the inspection plan for the PiWeb report:

To set **Allow Editing upon CNC start** and **Allow Editing when editing the inspection plan** for the PiWeb report, select



Measurement tab then Multiple Printout and in the window that opens select **Select printout header parameters** (upper right) this will open the Select Printout Header Parameters window. The custom variables created should be in the list.

For the PiWeb report select if the variable is editable at **Run**, at **Measurement**, or at **both Run and Measurement**:

Check **Run** for **Allow Editing upon CNC start**

Check **Measurement** for **Allow Editing when editing the inspection plan**

For the Variable created check:

Run for **Job_Number** (CNC start)

Measurement for **Programmer** (Inspection Plan)

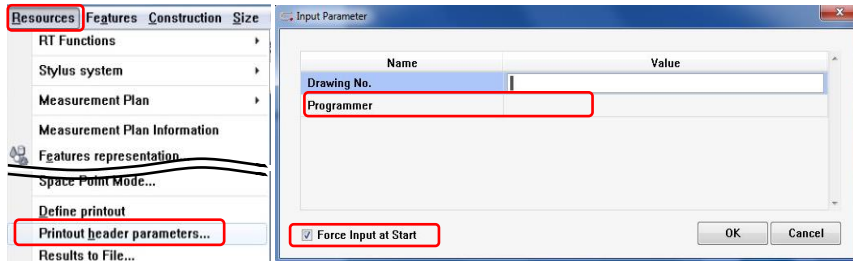
Run for **QC_Inspector** (CNC start)

Run for **Shift_Manufacturing** (CNC start)

Note: If using a Template Program, set these up in the Template Program, if not, the variables will have to be selected for every program. Likewise each existing program the variables will have to be selected.

Modifying / Using the Variables:

With a program open select **Resources/Printout header parameters**, the Input Parameter window opens displaying the



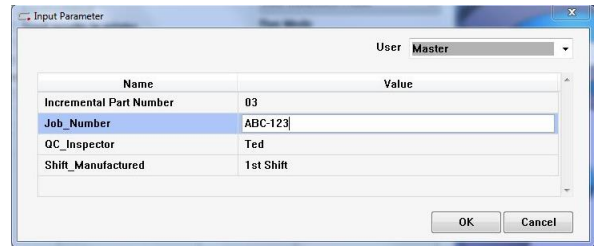
Input Parameter window opens displaying the variables where **Measurement** has been checked, **Drawing No.** and **Programmer**, with their default values. These are the variables that are **Allow Editing when editing the inspection plan**.

Next check **Force Input at Start** at the bottom left of the window, this forces the variables that are **Allow Editing upon CNC start** to open when the program runs.

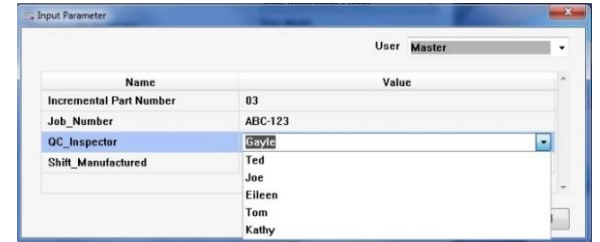
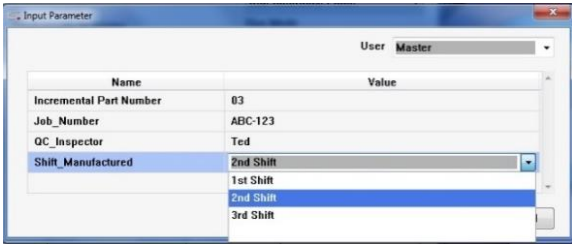


To view the CNC Start variables select **Plan/Preassign CNC Start Values...** the Preassign CNC Start Values window opens, select **Printout header data**, the Input Parameter window opens displaying the variables where **Run** has been checked, **Incremental Part Number**, **Job_Number**, **QC_Inspector**, and **Shift_Manufactured**, with their default values. These are the variables that are **Allow Editing upon CNC start**.

Job Number: Keyboard Entry at CNC Start; click in the box and type in the Job Number using the Keyboard.



Shift Manufactured: List drop down, **NO** Keyboard Entry at CNC Start; click and select the Shift Manufactured from the list with the mouse.







QC Inspector: List drop down, **WITH** Keyboard Entry at CNC Start; click and select the QC Inspector from the list with the mouse or click in the box and type in the QC Inspector using the keyboard if not in the list. In this example Gayle was entered using the keyboard because she was not in the list.

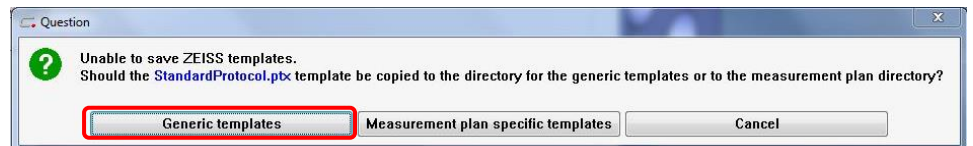
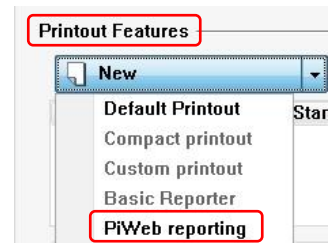



Programmer: Keyboard Entry in the Inspection Plan (**Resources/Printout header parameters**); click in the box and type in the Programmer's name using the Keyboard.

Now that we have variables created and editable in the proper areas, it is time to get them in the header.


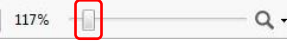
Modifying the PiWeb Header:

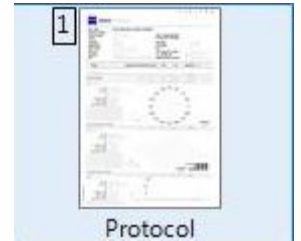
Start by selecting  Measurement tab then  Multiple Printout in the **Printout Features** section of the new window that opens select **New/PiWeb Reporting** to add an additional report. With the report just added highlighted, select  Opens PiWeb Designer select **Generic templates** from the window. **This is an important step; creating the report in the Generic Templates section allows the report to be used for any program.** Name your template **Standard Protocol Modified Header 18** (18 being the version of Calypso it is created from, for this guide we are using Calypso 2018) and select  Save and PiWeb Designer will open.



Note: If a modified PiWeb template has been created, add and highlight it in the list and select  Opens PiWeb Designer and modify the Header for the variables created.

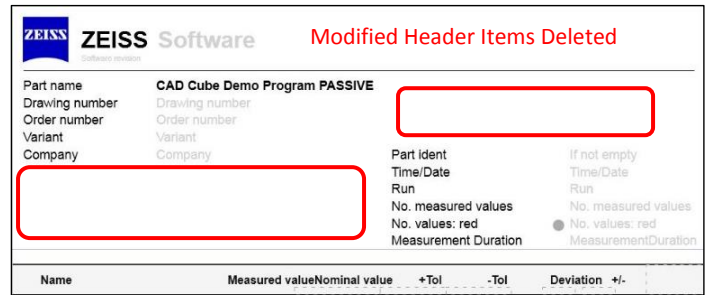
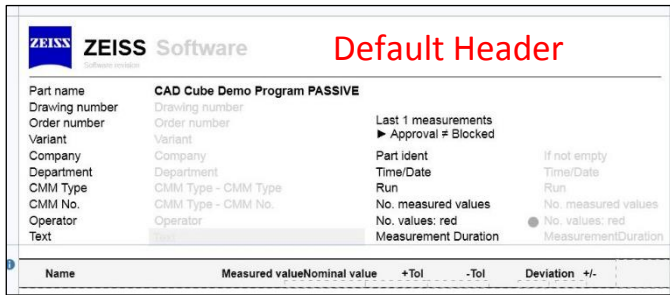
To view changes to the report in PiWeb Designer select  Page Preview at the top of the page or press F11 on the keyboard.
Note: The PiWeb report must be closed before editing can continue.

Once in PiWeb Designer select the  Pages tab on the left side. Choose the Protocol page that looks like the image on the right. This will display the Protocol page on the right side of the screen. Start by using the Magnification Slider at the top right  and magnify the page somewhere between 75 and 200%.



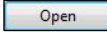


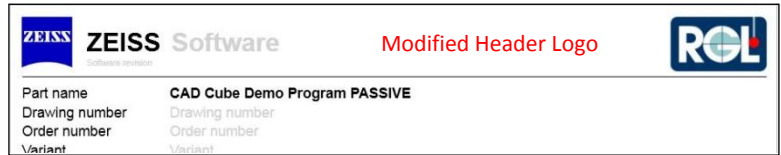
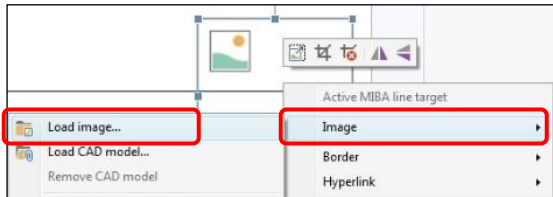
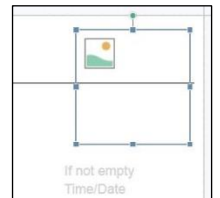
Start by deleting some of the information on the default header that is not required. Leave Drawing Number, Order Number, Variant, and Company so we can modify these for the variables just created. To delete something highlight it and press Delete on the keyboard or right click and select Delete.

Note: Holding down **Ctrl** on the keyboard while selecting items will select multiple items at once.



Adding a Company Logo:

First select the Toolbox tab  on the left or press F2 on the keyboard. Select  and drag it on to the upper right section of the header. Right Click in the Image Window just added to the header and select **Image/Load Image** and select the image you want to load and select . Resize the Image (click corner) and move it to the location desired by using the mouse.




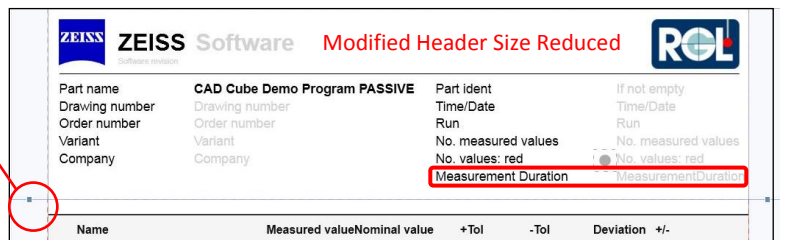
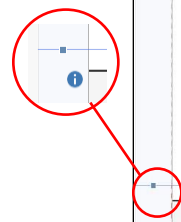
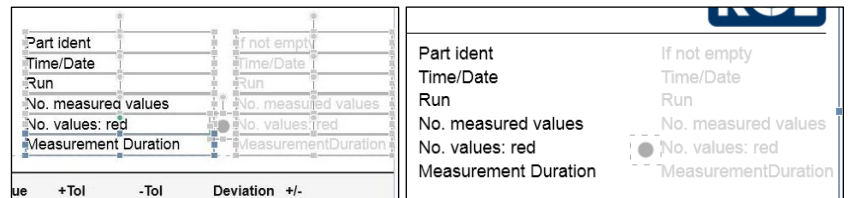
Reducing the Header size:

Start by highlighting all of the items on the right side of the header (Hold Ctrl on the keyboard and select each item) then move them up on the header just below the line under the Zeiss logo.

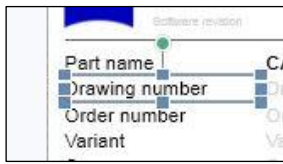
WARNING: after selecting all of the items **DO NOT** hold **Ctrl** to move them or you will copy them.

Next click on the left hand side of the report in the light blue area so you can see the blue

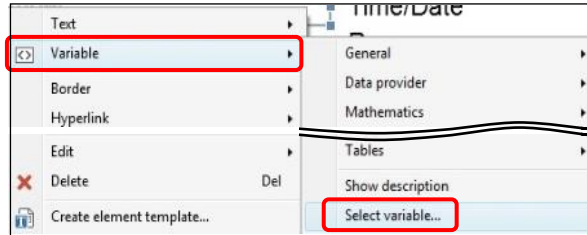
header line, click the blue box  and drag the line until it is closer to **Measurement Duration**.



Adding the Custom Variables to the Header:

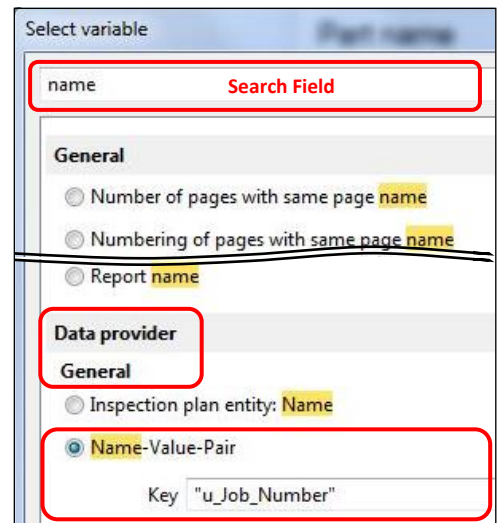


Start by selecting Drawing Number (left side), then double click, press delete on the keyboard to remove the existing string (\$) and type in **Job Number:** (Note: do not press enter after typing or an additional line will be added to the text box).



Next select Drawing Number (right side), then right click and select **Variable/Select Variable**. In the window that

opens type **name** in the search field and look for the **Data Provider/General** section and select **Name-Value-Pair**, for **Key** type in **"u_Job_Number"** (Do not forget the "quotation marks") this assigns the variable to the text box (must be entered EXACTLY as created) then select **OK**.



Name	Measured value	Nominal value	+Tol	-Tol	Deviation +/-
D1 Flatness of Datum A D3	0.0042	0.0000	0.0500	0.0000	0.0042

Repeat the above step for the other custom variables:

Replace **Order Number** with **Shift Manufactured** and **"u_Shift_Manufactured"**

Replace **Variant** with **QC Inspector** and **"u_QC_Inspector"**

Replace **Company** with **Programmer** and **"u_Programmer"**

The modified header should look something like this!

Final Notes:

These are just some basic ways to modify the header. There are many, many more ways to do this, then what has been described in this guide, it is just meant to get you started. This guide is barely scratching the surface of what the PiWeb report can look like.

If using template programs you can add this report to the template program, select the variables ([page 4](#)), and this will be the default report or an additional report moving forward.

For older programs select this report from Generic Templates, select the variables ([page 4](#)), and save the program.

For users with multiple seats of Calypso, the .ptx file does not have to be created on every seat it can be copied and placed in the following path: **C:\Users\Public\Documents\Zeiss\CALYPSO\protocol\PiWebReportingTemplates**.

For users with multiple seats of Calypso, the userfields.ini ([page 3](#)) will have to be copied and placed on every PC, **C:/Users/Public/Public Documents/Zeiss/CALYPSO/protocol/protform** (backup the userfields.ini in a different location just in case a Calypso update changes it back to the default).

If this modified report is the only report you wish to use go back into Multiple Printout and delete the PiWeb Reporting_1 StandardProtocol.ptx by highlighting it and selecting Cut Printout Element Selected.