

2465 Piston Gauge, manual mode, Setup in COMPASS for Pressure Software

FLUKE®

Calibration

This procedure is intended for Fluke Calibration customers trained on use of 2465 Piston Gauge and COMPASS for Pressure Calibration Software

Purpose

This document instructs how to setup a 2465 Piston Gauge for manual operation in COMPASS for Pressure software.

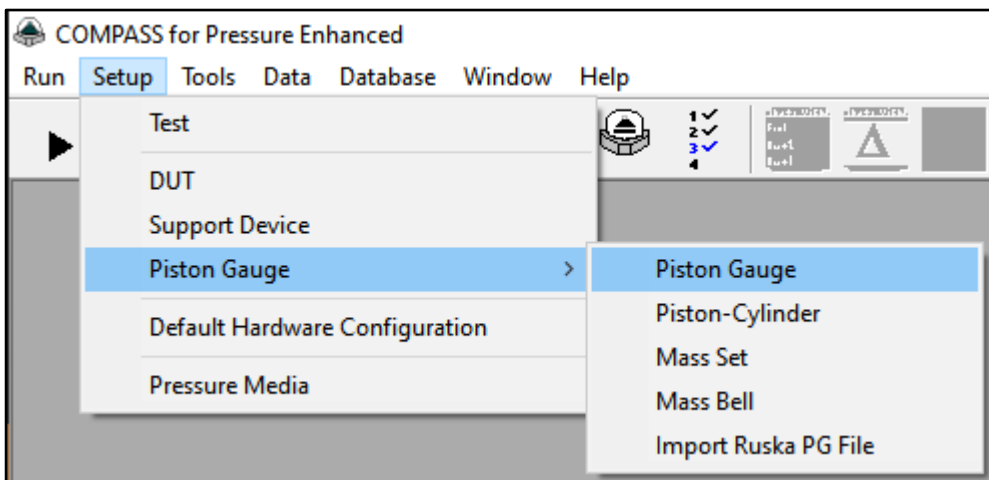
Note

If you have a CD or electronic version of the .pc and .ms WinPrompt files use the COMPASS for Pressure import feature. See the document “Import individual Ruska PC, MS into COMPASS.pdf” and the Application Note, “How to set up COMPASS® for Pressure software for use with Ruska Model 2400 piston gauges”

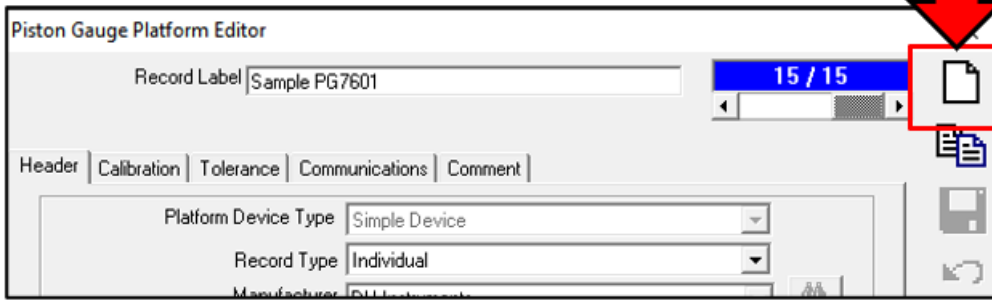
Instructions

First setup the piston-cylinder, mass set and trim mass set (if applicable) setup files so they can be chosen in the PG setup. See the document “2465 PG mass set and piston-cylinder units, Setup in COMPASS for Pressure.pdf”. Then setup the 2465 Piston Gauge as a Piston Gauge.

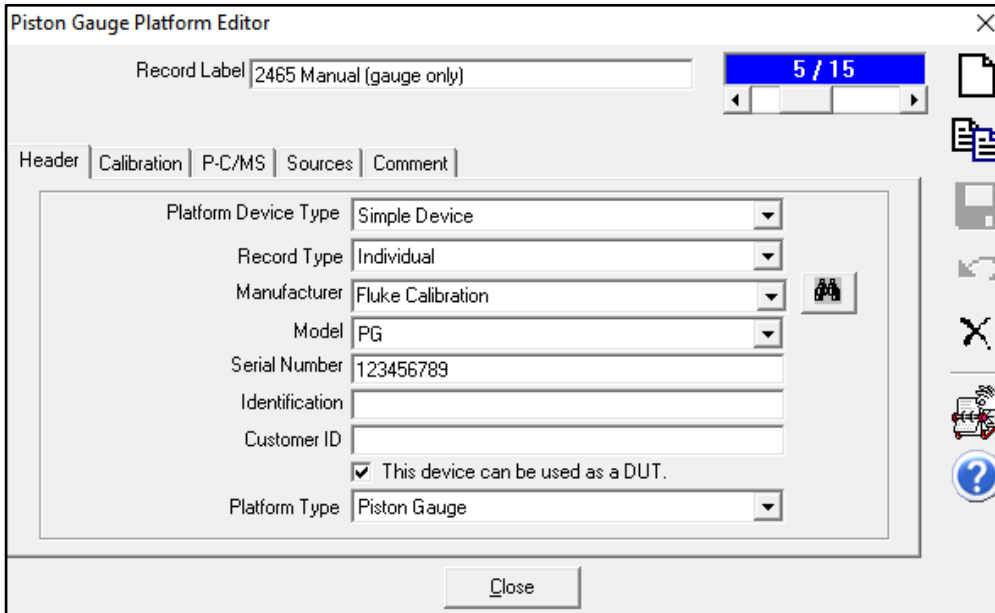
Select “Piston Gauge > Piston Gauge” in the “Setup” menu to open the PG Editor



Click the white piece of paper to create a new item



Type in the information as shown below (but with your serial number). It's best to make one setup for gauge mode and one for absolute mode to ensure operation is correct.



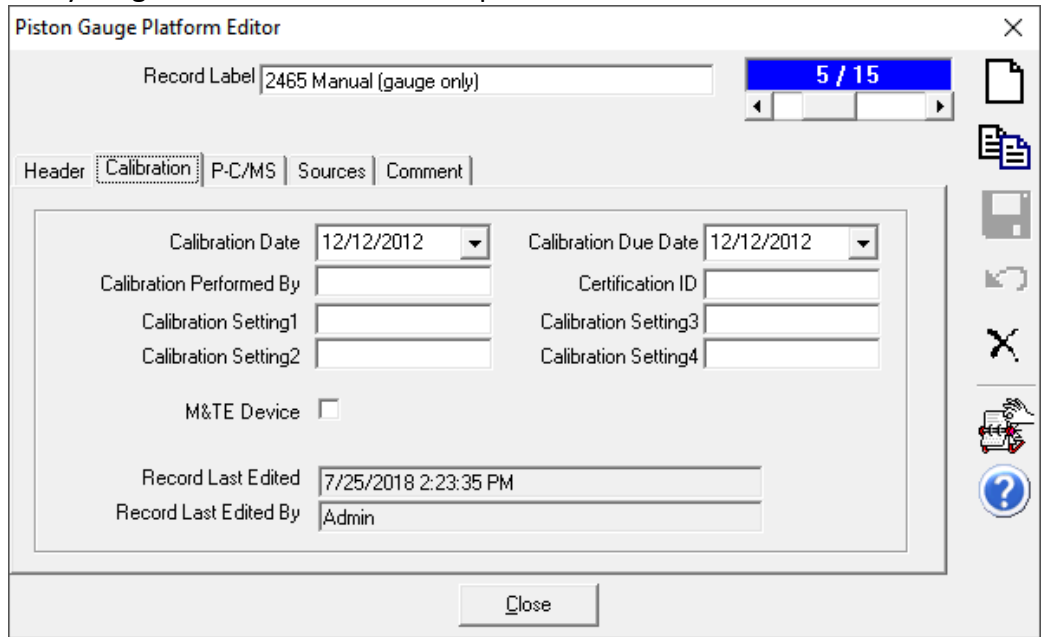
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Electrical RF Temperature Pressure Flow Software

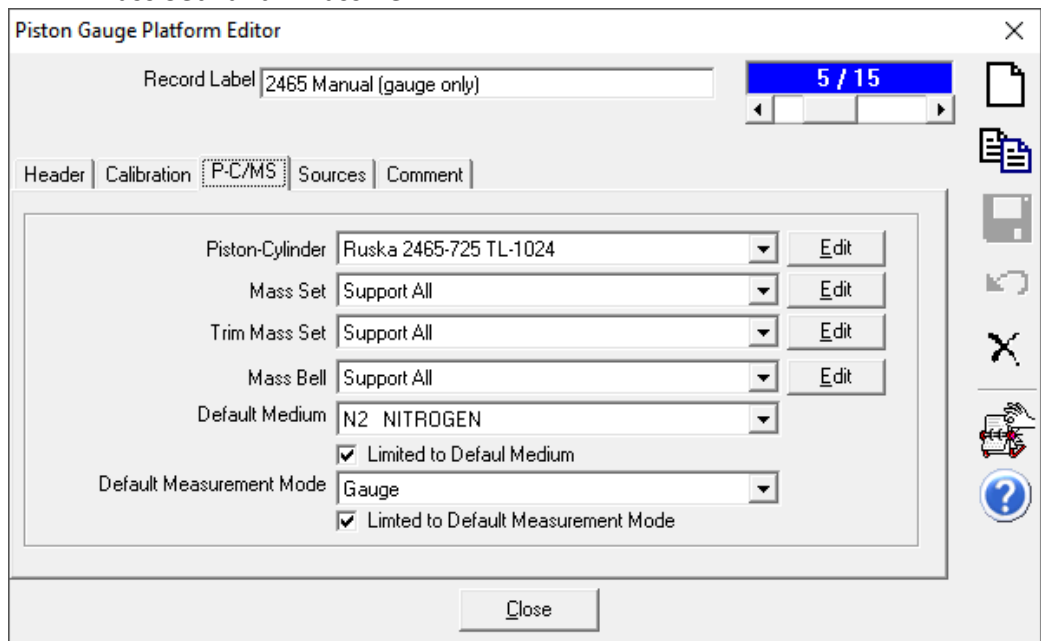
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Everything in the Calibration tab is optional



Choose "Support All" or click the [Edit] button to select items. Do this for "Piston-Cylinder", "Mass Set", "Trim Mass Set" and "Mass Bell".



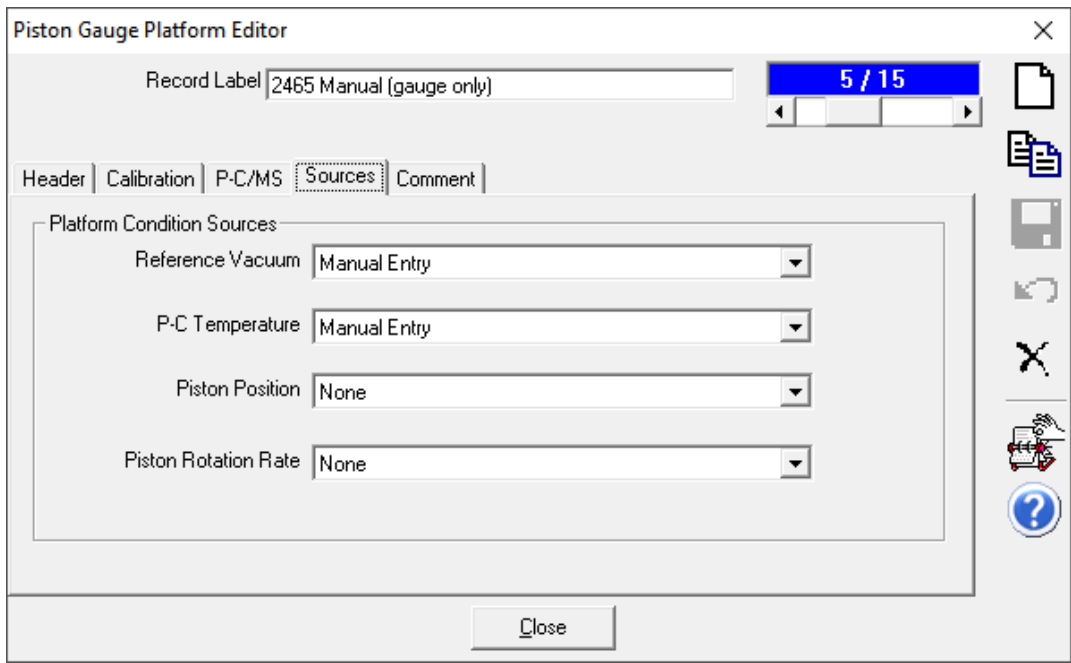
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Electrical	RF	Temperature	Pressure	Flow	Software
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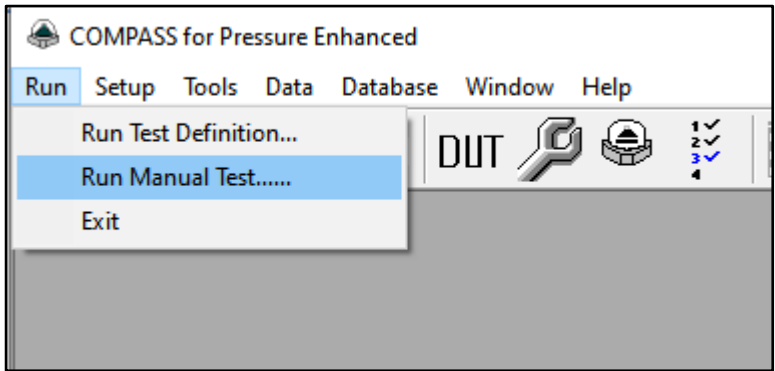
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Choose "Manual Entry" or "None" on the "Sources" tab as shown below



Save the 2465 Piston Gauge setup by clicking the black disk icon.

Run a sample manual test to check operation. Select "Run Manual Test..." in the Run menu.



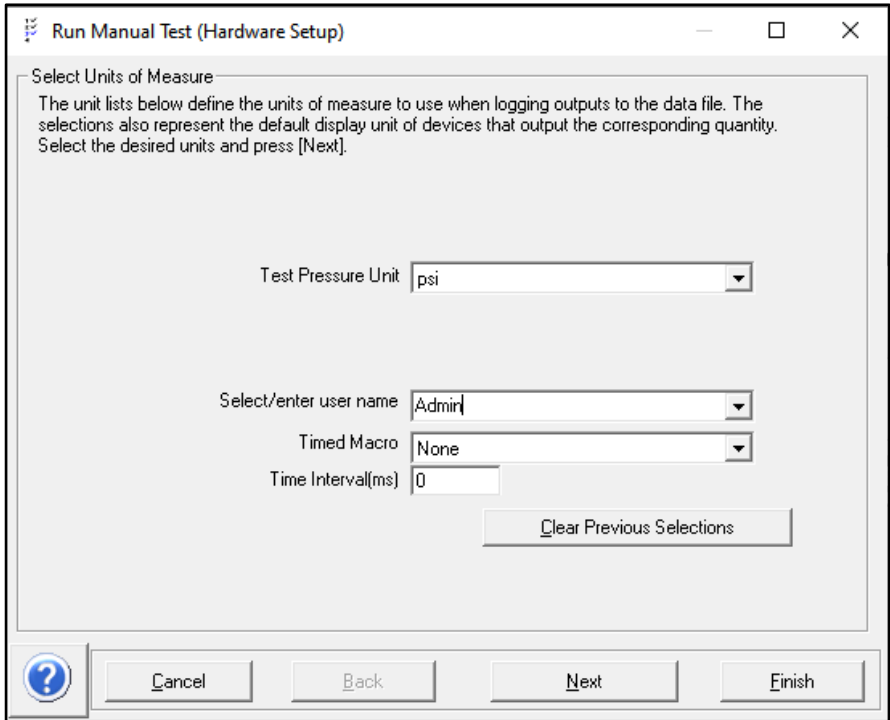
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Electrical	RF	Temperature	Pressure	Flow	Software
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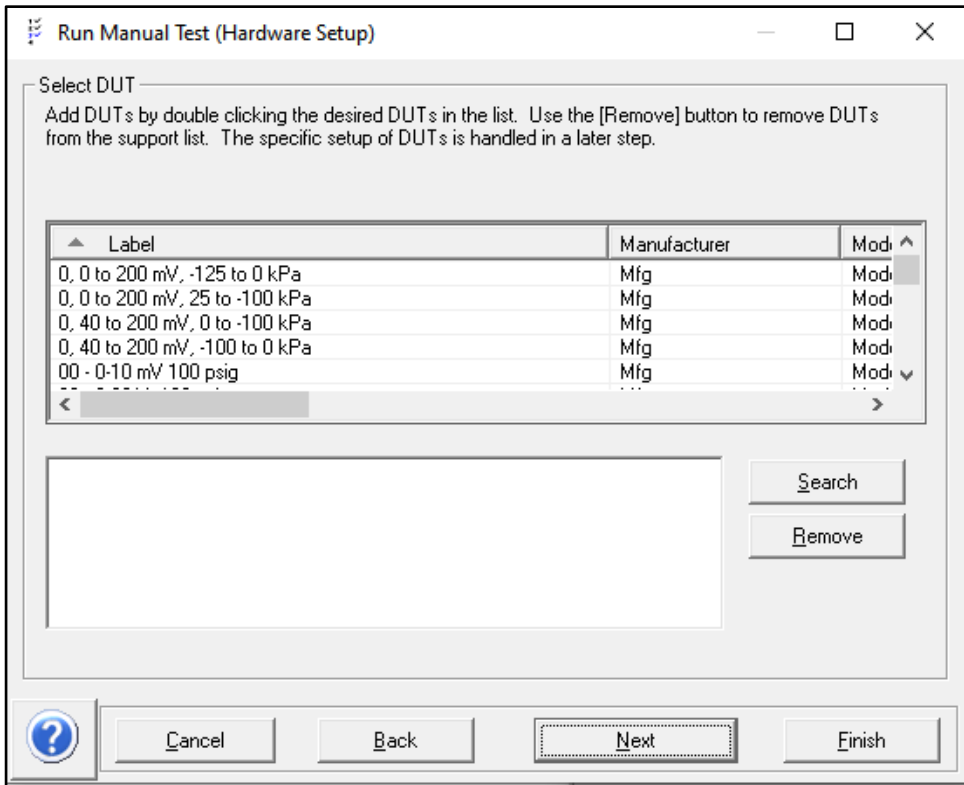
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Click the [Clear Previous Selections] button to clear the prior test history.
Select the pressure units you want to use.



Don't select a DUT, press [Next]



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For “Reference Pressure” choose the record label from your 2465 Piston Gauge, “2465 Manual (gauge only) / PG Pressure” in the example below. The other selections will automatically populate as “Manual Entry” or “Manual Control”. Leave them as is.

Run Manual Test (Hardware Setup)

Test Hardware Configuration

Ambient Pressure: Manual Entry

Ambient Temperature: Manual Entry

Ambient Humidity: Manual Entry

Reference Pressure: 2465 Manual (gauge only) / PG Pressure

Test Pressure Control: Manual Control

Multiplexer: None

Valve Driver: None

Default Hardware Setup

Setup Picture

Cancel Back Next Finish

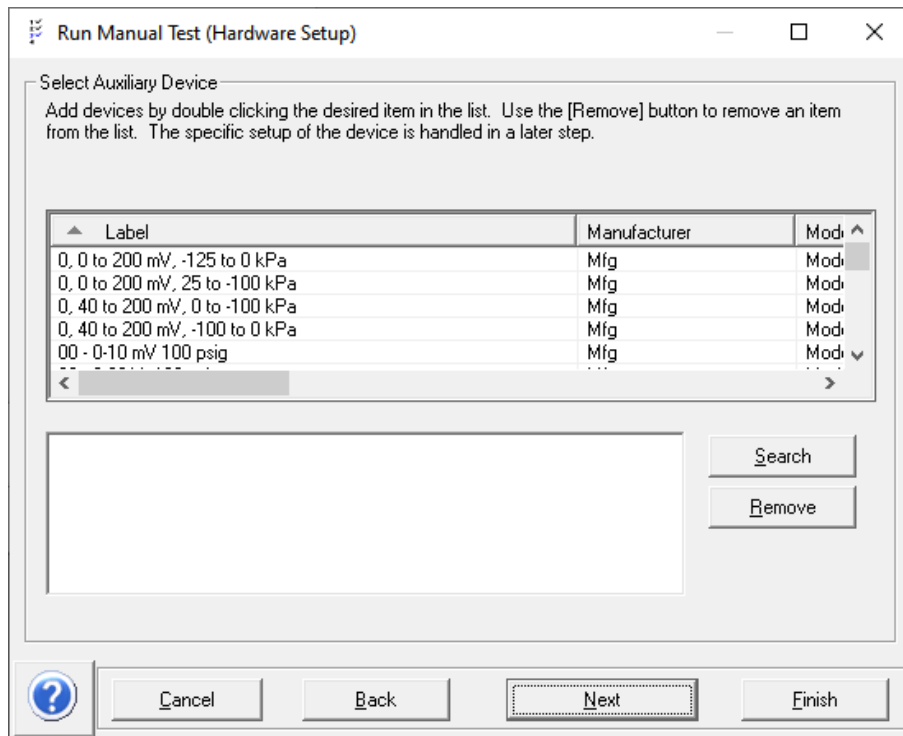
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Electrical	RF	Temperature	Pressure	Flow	Software
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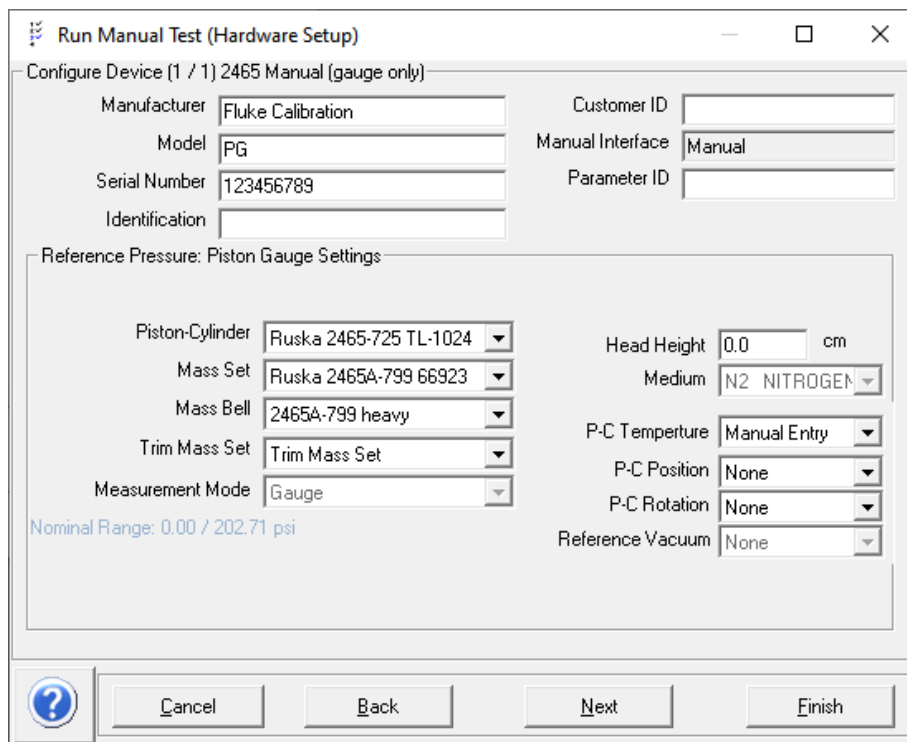
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Don't select any auxiliary devices, press [Next]



Choose which piston-cylinder, mass set, mode, etc. to use



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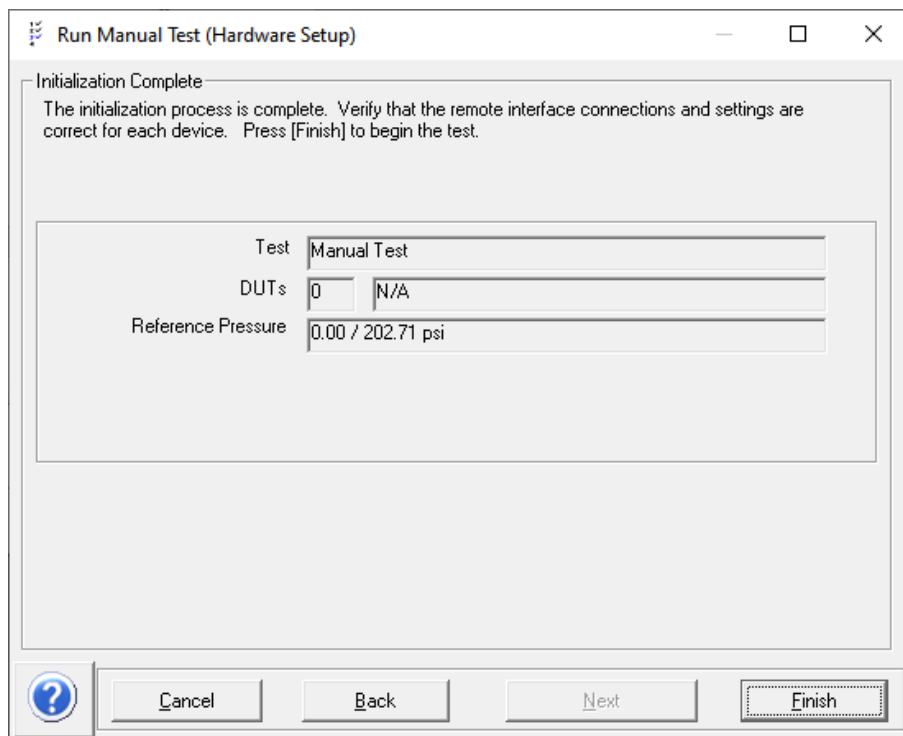
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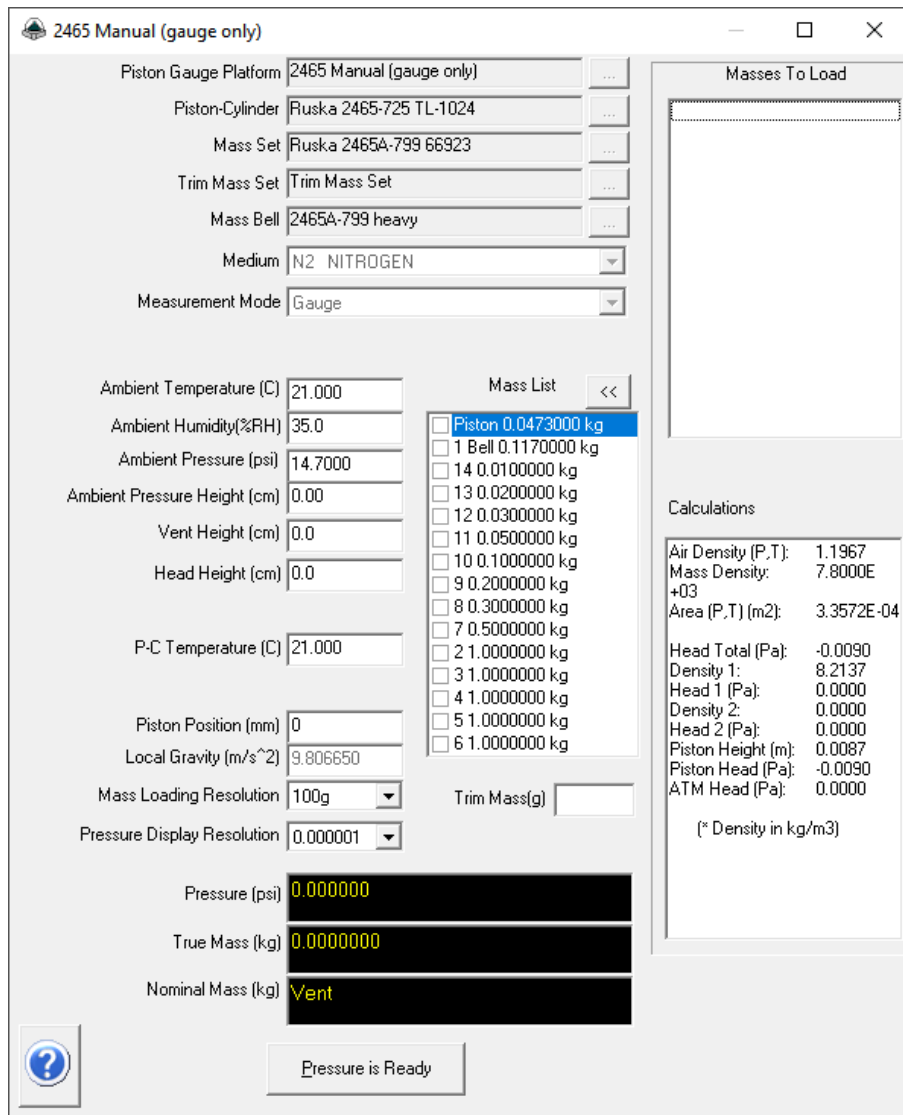
Press [Finish] on the final screen.



If the PG Calculator window doesn't appear click the "Display Device Window" icon then choose "2465 Manual (gauge only...)" device to display the PG Calculator.



Enter the values for "Ambient Temperature", "Ambient Humidity" etc. Click on the unit to change it (e.g. change psi to mbar)



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Alternately enter the pressure that you want in the Pressure (unit) box and press [Enter] on your keyboard, or click the masses that you want to load. Either method will calculate the actual pressure (in yellow to the right of the Pressure (unit) box). If you want to get closer to the desired pressure, change the "Trim Mass" to a non-zero value and the box to the right of it will show you what trim mass to load.

When the piston and masses are floating, and all values are entered and confirmed, press the [Pressure is Ready] button. The pressure in yellow is the actual reference pressure.

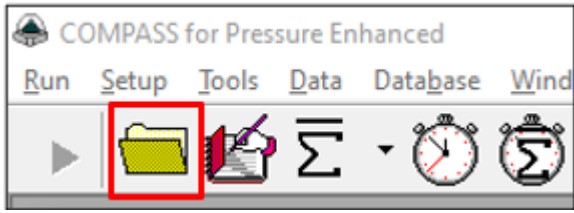
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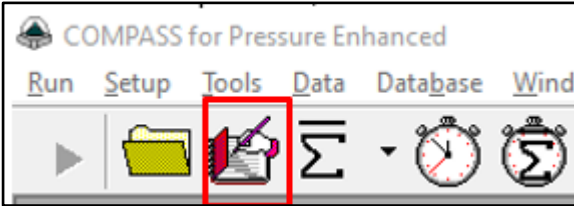
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If you want to record the pressure in a datafile, click the yellow folder icon at the top left of the COMPASS software window. This will create a datafile and open the data grid at the bottom of the window.



To record the pressure, click the red notebook with pen icon. The data point will be recorded in the data grid.



C:\DHI\COMPASS for Pressure\Data\20221018_001.dat

Point	Time	Set Point (psi)	Set Time (sec)	DUT Raw Out1 (MPa)	DUT Pressure (psi)	Reference Pressure (psi)
1	17:25:22		0.0			15.025992

End of Procedure