Hello, this a video for Engineering Measurement & System Monitoring unit, learning outcome two.

So, we have a pressure gauge from an industrial rig and an instrument called a digital pressure indicator sometimes called a DRUCK. We must record the readings in this table, which needs explained in this video.

So, we have the input here, which is whatever the calibrated instrument, is this case it is the pressure source the model is called a DRUCK. We have a 10bar gauge to be calibrated, so it can be from zero to ten bar in one bar steps. Measurement would be taken from the output which is the pressure gauge which is reading in psi units. Target values might not be able to be written at first but would have to be calculated by converting the bar readings to psi by multiplying by 14.5. Then we take readings by pumping up and fine tuning using the screw. The reading is then taken of the gauge “as found” in psi, we would expect to get it close to what we want but it will be a bit away. The error can then be calculated by the difference between “as found” and “target” columns. Then the maximum error can be picked out and we can do a calculation for error percentage of full scale.

Then if we adjusted this needle to read true and retested, the “As left” column could be filled out with an improved error calculated.

Thank you for listening.