

## Pressure Transmitter Calibration

by

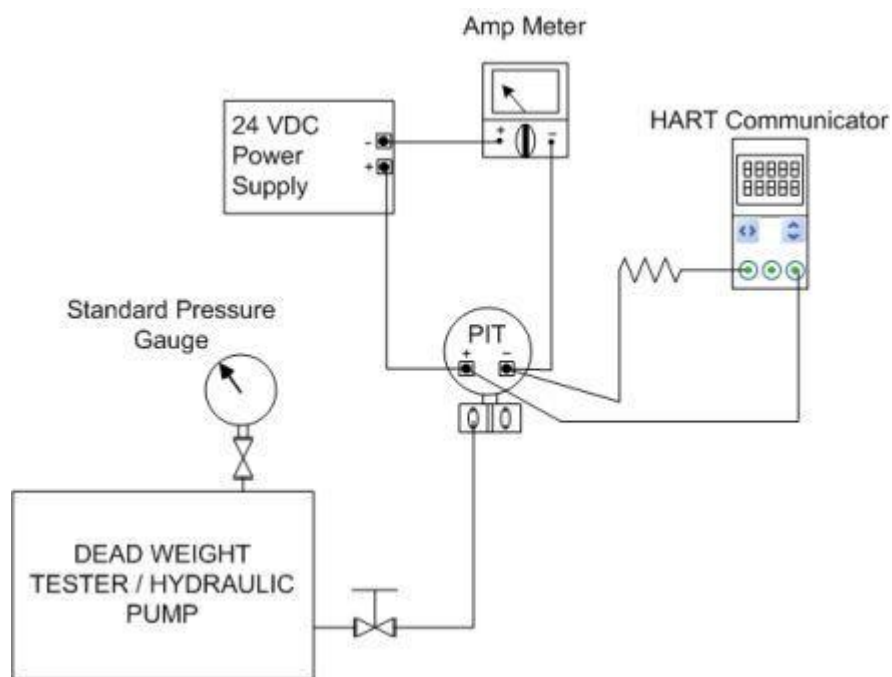
**admin**

Published on 12-15-2011 02:21 AM

### Typical Procedure:

1. Set up the pressure transmitter as shown in the picture below.
2. Check the pressure transmitter span in the related datasheet.
3. Carry out the five point calibration start from 0% to 100% of span range value.
4. First, set the pressure of a dead weight tester or hydraulic pump at pressure equal to 0% of the transmitter span range value.
5. Read the ampere meter reading (wait until the reading is stable) and record it.
6. Repeat step 5 to 6 for 25%, 50%, 75%, and 100% of the transmitter span range value.
7. Repeat step 5 to 6 for downscale start from 100%, 75%, 50%, 25%, and 0%.
8. Calculate the % error for each test point and check whether it still under an acceptable range.
9. If all result still in the acceptable % error range, then the calibration is finish. If there is some test point that shows the result out of acceptable % error range, then do the next step.
10. Set dead weight tester pressure at 0% of the transmitter span range value. The ampere meter reading shall be 4 mA. If the reading is already 4 mA then continue to next step. If the reading not 4 mA then adjust the zero potentiometer of transmitter until the ampere meter read 4 mA. The zero adjustment also available though HART communicator by using zeroing application.

11. Set dead weight tester pressure at 100% of the transmitter span range value. The ampere meter reading shall be 20 mA. If the reading is already 20 mA then back to step 5. If the reading not 20 mA then adjust the span potentiometer of transmitter until the ampere meter read 4 mA. The span adjustment also available though HART communicator by using span application.



Read more: <http://www.instreng.com/content/122-pressure-transmitter-calibration.html>