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	INTEGRATED MANAGEMENT SYSTEM	Revision Date:	05/01/2022
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## CALIBRATION OF PRESSURE GAUGES

**Objective:** To check accuracy of pressure gauge

**Scope:** This procedure is applicable for checking accuracy of pressure gauge.

**Reference:** Operating manual for Pressure Gauge.

**Standard used:**

- 1) Pressure calibrator: FLUKE 729-300G
- 2) Pressure calibrator: FLUKE 719PRO-30G

**Performance Criteria:** Accuracy of measurement of Pressure gauges as mentioned in MMTE

**Reference:** RISK /INST/17

**Aspect for the Activity :** Waste generation

**Identification of Hazards:**

**Physical:** Pressure (Compressed Air), Honeybee/snake bite, Noise

**Mechanical:** Trip & Fall

**Chemical:** CO Gas poisoning, Steam, Dust, Graphite

**Ergonomics:** Insufficient work practices

**Hazard due to Human Behavior/Human error:** Not adhering to WI/ PPE, Alcoholism, Use on non-certified tools/equipment.


**Responsibility:** Sr. Engineer Instrumentation/Associate/Inst Technician

**Procedure:**

All engineers/technicians should follow this procedure whilst isolating and removing instrument for calibration, re-installation and commissioning. Care must be taken while removing and refixing to avoid contact with hot areas, gas & steam leakages.

**Caution :** Always isolate the Air line by closing the Ball/needle Valve while removing the pressure gauge. While Calibrating the Gauge the pressure should not exceed the 130% of Full scale Range.

- 1) Inform in to control room & take permission from process till the time job is to be carried out on instrument.
- 2) Close the isolation valve on process tapping.
- 3) Remove the Pressure gauge & take it to lab if required, Clean the bottom Mounting fitting release the accumulated pressure, moisture, air bubble in case of steam line.
- 4) Now connect the pressure calibrator to pressure gauge and apply zero pressure, Check zero indication on pressure gauge or adjust zero if required.

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- 5) Increase the pressure in step of 25 % of span up to full range and note the corresponding ascending readings.
- 6) At 100 % of span reading should indicate Full Scale or adjust span if required.
- 7) In same way note down the descending readings by decreasing pressure in step of 25 % of full range up to zero.
- 8) Prepare the report as per calibration format in ascending & descending measurement and file the record.
- 9) Install the Pressure gauge and open the isolation valves on process tapings.
- 10) Give the Pressure gauge inline for measurement by opening the Isolation valves Inform to control room & take it inline.

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<b>Date: 05/01/2022</b>	<b>Date: 05/01/2022</b>	<b>Date 05/01/2022</b>