



DALMIA CEMENT (B) LIMITED
DALMIAPURAM
INSTRUMENTATION DEPARTMENT



Issue No. 02	Rev. No: 01	Effective Date: 22.05.2015	SOP/INST/05
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Issued By: S & P	Approved By: Elect. & Inst Head
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SOP FOR CALIBRATION OF PRESSURE AND FLOW TRANSMITTERS

Scope/Purpose : This SOP is applicable for Calibration of Pressure and flow transmitters

Responsibility : Instrument section -Engineer

Accountability : Section In-Charge

PPE:

Helmet, Nose Mask, Google

Tools:

1. Multi meter
2. Screw driver
3. Master Calibrator

Hazard Analysis:

Risks associated

Pressure Line exposure to body

Mitigating Measures

Isolating Pressure line by closing valve

Training needs:

1. First aid procedures
 2. Awareness of Electrical shock
 3. Awareness of types of gases
 4. Operating procedures
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1. Isolate the Process connection by closing isolation valve
 2. Remove process connection and connect the pressure source to Transmitter.
 3. Connect the multi meter across the CHECK / TEST terminals and remove the shorting link if provided.
 4. Apply pressure as indicated in Log sheet and measure the output current.
 5. Note down the readings. If the error is more than +/- 0.5% then go to step 5.5 else go to step 5.9.
 6. Apply pressure as indicated in Log sheet, Corresponding to 4 mA and adjust the output to 4 mA by zero potentiometer / screw.
 7. Apply pressure as indicated in Log sheet corresponding to 20 mA and adjust the output to 20 mA by span potentiometer / screw.
 8. Repeat the step 6 and 7 till the percentage of error is within +/- 0.5%.



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9. Apply pressure as indicated in Log sheet, corresponding for intermediate ranges and note down the readings.
10. Remove the pressure source and connect the process connection to transmitter.
11. Put back the CHECK / TEST terminal shorting link if provided.

Emergency / Emergency Shut OFF:

1. If any injury is there, give First aid and inform to the Safety department or Call Emergency number 9865177444/9865165926/9865155288

Records/Annexure:

1. Daily check list
2. Sop for operating procedure

JOB SAFETY ANALYSIS: (JSA)

Job Safety Analysis	Job: Calibration of Pressure and flow Transmitter	Date: 01 -03 - 2013	Analysis by:	Reviewed by:
Title of employee doing job: Instrument Mechanic	Supervisor: Section Engineer	Department: Instrumentation	Section: Instrument	Approved by:
Req'd/recommended PPE: Insulated Tools, Safety shoes, Nose Mask				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action



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