	<b>COROMANDEL INTERNATIONAL LIMITED</b> <b>Sarigam</b>	Doc No. : INST /SOP/ 04
<b>Issue No.01</b>	DEPARTMENTAL MANUAL OF INSTRUMENT	<b>Issue/ Revision</b> <b>Date: 01/10/2017</b>
<b>Revision: 00</b>	Title: SAFE OPERATING PROCEDURE FOR CAL & PM OF TEMPERATURE INDICATOR/ TRANSMITTER	<b>Page 1 of 2</b>

## 1.0 PURPOSE:

For calibration & preventive maintenance of Temperature indicator/Transmitter to maintain reliability.

## 2.0 SCOPE:

This procedure is applicable for RTD (PT100) and Thermocouple input temperature Indicator/ Transmitter in process plant, ETP, MEE, Tank farm, utility & boiler.


## 3.0 DEFINITION:

**NIL**

## 4.0 PROCEDURE:

- 4.1 Take work permit from the shift in charge/area in-charge to disconnect the temperature indicator for calibration & preventive maintenance.
- 4.2 Preventive should be done as per the quality instruction DOC No: QI/EN/01.
- 4.3 Measure the Ohms from RTD or mV from Thermocouple after disconnecting the terminals and note down.
- 4.4 Remove the RTD or thermocouple connection from TI/TT and connect the RTD or mV source equipment.
- 4.5 Observe and record the temperature indicator/transmitter readout by simulating temperature at 0%,25%,50%,75% and 100% of instrument range .
- 4.6 If the indication deviates from the simulated value by 0.1 % of FSD.
- 4.7 Then perform calibration.
- 4.8 Calibration can be carried out by adjust of Zero or span screw and by key functions.
- 4.9 After calibration, connect the instrument to process RTD or thermocouple.
- 4.10 Check the paraffin/silicone oil level in the thermo well. If the level is low or dry, then fill the oil in the thermo well.
- 4.11 Greasing the cover and check whether it painted or not. If there is no painting then inform to superior about painting the instrument and note down the remark on the report.
- 4.12 Hand over the equipment to the shift in charge of the plant.
- 4.13 Preventive maintenance record should be maintain in format no: INST/F/11.
- 4.14 Calibration record should be maintain in DOC. No: QF/EN/09.

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Date :	Date :	Date :

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4.15 Close the permit.

## 5.0 FREQUENCY:

- 5.1 At the time of initial startup after shutdown of more than two weeks.  
5.2 After every 6 months, if plant is running.

## 6.0 RESPONSIBILITIES:

Asst. Manager / Sr-officer (Inst.) / Area in-charge

## 7.0 ACCOUNTABILITY

Section Head

## 8.0 RECORDS:

Calibration reports should be maintained for one year.

## 9.0 ATTACHMENTS :

Sr. No.	Format	Format No.
1	Calibration Record	QF/EN/09
2	Preventive maintenance check points- level/Pressure/Flow/VAC/TT	INST/F/11

## 10.0 CHANGE RECORD :

Date	REV. NO.	CHANGES INCORPORATED
01/10/2017	00	Original Issue

**\*\* END OF PROCEDURE \*\***

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