



**STANDARD OPERATING PROCEDURE**

<b>Department:</b> Quality Control	<b>SOP No.:</b>
<b>Title:</b> Operation and Calibration of Micrometer	<b>Effective Date:</b>
<b>Supersedes:</b> Nil	<b>Review Date:</b>
<b>Issue Date:</b>	<b>Page No.:</b>

**1.0 OBJECTIVE:**

To lay down a procedure for operation and calibration of micrometer.

**2.0 SCOPE:**

This SOP is applicable to the micrometer in Quality Control Department.

**3.0 RESPONSIBILITY:**

Officer, Executive – Quality Control Department

Head – Quality Control Department

**4.0 DEFINATION(S):**

NA

**5.0 PROCEDURE:**

**Make:** Mitutoyo, **Model:** MDC- 25SB

**5.1 Operation:**

5.1.1 Ensure that instrument is clean and free from dust.

5.1.2 Check the calibration status of the instrument.

5.1.3 Switch on the instrument display screen with help of button named “Origin”.

5.1.4 Ensure that ‘0’ on the main scale and circular scale exactly coincides with each other & instrument display screen show zero reading.

5.1.5 Set the sample between the micrometer jaws by moving the knob attached to the side arm.

5.1.6 Slowly turn the thumb screw filled at the end of vernier scale till the end point.

5.1.7 Do not move the jaws by rotating vernier scale, use only the thumb screw.

5.1.8 Observed the reading on the digital screen.

5.1.9 Note down the reading.

**5.2 Calibration:**



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5.2.1 Micrometer shall be calibrated by authorized or trained Engg. Personnel or by approved external party.

5.2.2 If the readings are exceeding the acceptable limit, put an "OUT OF CALIBRATION" tag, and proceed as per SOP.

5.2.3 Calibrate the instrument once in a year.

**5.3 Precautions:**

5.3.1 Use the instrument carefully not to damage the jaws.

5.3.2 After use keep the instrument in the box provided.

5.3.3 Change the battery when the display is not readable.

**6.0 ABBREVIATION(S):**

QCD – Quality Control Department

SOP – Standard Operating Procedure

NA – Not Applicable

**7.0 REFERENCE(S):**

NA

**8.0 ANNEXURE (S):**

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**9.0 REVISION CARD:**

S.No.	REVISION No.	REVISION DATE	DETAILS OF REVISION	REASON (S) FOR REVISION