OBSERVATION SHEET

Purpose	Calibration	Certificate No.	UCPL/25-26/M123/1	Date of Calibration	30/09/2025

SRF Number	M/123	SRF Date	30/09/2025	Calibration Frequency	12 Months

DETAILS OF UNIT UNDER CALIBRATION (UUC)

Name of Instrument	: Plunger Dial	**Make**	: Baker
Identification No	: --	**Serial No**	: FKE 169
Range	: 0 to 10 mm	**Resolution/Least Count**	: 0.01 mm
Location	: --	**Calibration Location**	: In House
Condition of Instrument	: Satisfactory	**Calibration Procedure**	: UCPL/CP/MECH/07
Standard Reference	: IS 2092:1983		

Environmental Conditions: **Start Temp:** 21.1 °C **End Temp:** 21.2 °C **Start Humidity:** 50 %RH **End Humidity:** 51 %RH

DETAILS OF MASTER EQP USED FOR CALIBRATION

Sl.No.	Name of Standard	Id/Sr. No.	Certificate No	Calibration Date	Due Date
1	Dial Calibration Tester	UCPL/DCT/01 / 091015	RPL-2025-0894-C-008969	28/08/2025	29/08/2027

Discipline : Mechanical (Group : Dimension -Basic Measuring Instrument ,Gauge Etc.)

Calibration Results

Sr.No.	UUC Set	Measured Error
TURN 01 (Division of Dial)		
	mm	µm
1	0	0
2	0.1	-1.2
3	0.2	-0.8
4	0.3	-2.2
5	0.4	-2.8
6	0.5	-4.4
7	0.6	-3.8
8	0.7	-4.4
9	0.8	-3.4
10	0.9	-3.6
TURN 02 (Division of Dial)		
	mm	µm
1	0	-4.2
2	0.1	-4.8
3	0.2	-6.2
4	0.3	-5.6
5	0.4	-5.4
6	0.5	-4.4
7	0.6	-4.8
8	0.7	-5.4
9	0.8	-5.8
10	0.9	-6.4
TURN 03 (Division of Dial)=0		
	mm	µm
1	2	-6.6
TURN 04 (Division of Dial)=0		
	mm	µm

Raw Data

UNITED CALIBRATIONS PVT. LTD.

Calibrated By	Checked / Verified By
Electronically signed by Vikas Kute 30/09/2025 03:27 PM	-

OBSERVATION SHEET

Purpose	Calibration	Certificate No.	UCPL/25-26/M123/1	Date of Calibration	30/09/2025

Sr.No.	UUC Set	Measured Error
1	3	-4.4
TURN 05 (Division of Dial)=0		
	mm	µm
1	4	-4.8
TURN 06 (Division of Dial)=0		
	mm	µm
1	5	-5.4
TURN 07 (Division of Dial)=0		
	mm	µm
1	6	-5.8
TURN 08 (Division of Dial)=0		
	mm	µm
1	7	-6.4
TURN 09 (Division of Dial)=0		
	mm	µm
1	8	-6.6
TURN 10 (Division of Dial)=0		
	mm	µm
1	9	-7.2
TURN 11 (Division of Dial)=0		
	mm	µm
1	10	-7.8

Permissible as per IS 2092

Sr.No.	Requirement	Limits of Error in µm	Error Observed in µm
1	Repeatability	2.0	1.2
2	Accuracy for any1/10th rev	5.0	1.6
3	Accuracy over any 1 rev	10.0	4.4
4	Accuracy over an any 2 rev	15.0	6.6
5	Accuracy over any larger interval up to 10 rev	20.0	7.8
6	Hysteresis	3.0	1.0

Type A Readings

Sr.No.	Calibration Point	m1	m2	m3	m4	m5
	mm	µm	µm	µm	µm	µm
1	10	-7.8	-7.4	-7.0	-7.0	-7.2

Raw Data

UNITED CALIBRATIONS PVT. LTD.

Calibrated By	Checked / Verified By
Electronically signed by Vikas Kute 30/09/2025 03:27 PM	-