


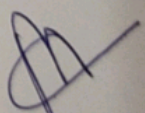
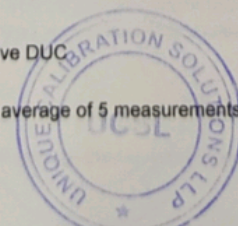


CALIBRATION CERTIFICATE											
UNIQUE LAB REPORT NO(ULR NO) :						CC310223000000827F					
SRF No. : 062			CERTIFICATE No. : UCSL/02-23/062_03			Instrument receipt Date : 25.02.2023			Calibration Date : 27.02.2023		
Customer Name & Address: M/s. ICTC TALUK HOSPITAL KATTAPANA, IDUKKI, KERALA, INDIA						Next calibration due (As per customer request) : 27.02.2024			Certificate Issue date : 02.03.2023		
						Identification on DUC (Device Under Calibration)					
						Instrument Name : MICROPIPETTE		Make : LABOPETTE		Range : 5-50 µl	
Serial No. : 09020883		Calibration Performed at : Mass & Volume Lab		ID No. : --		Location : LAB		Environmental Condition		Avg. Atmospheric Pressure (hpa) : 1009	
		Avg. Temperature (°C) : 23.4				Avg. RH (%) : 55					
Equipment & Master Used For calibration											
Instrument Used : Weighing Balance		Calibrated : UCSL		ID No. : UCSL-WB-01		Certificate No. : UCSL/10-22/329_01		Valid Upto : 18.10.2023		Sr No. : 0037905909	
										Accreditation No. : CC-3102	
Method Used : Gravimetric method				Discipline & Category : Mechanical - Volume				Calibration Reference Standard : ISO-8655-6 & ISO/TR 20461			
				Calibration Procedure : UCSL/SOP/01-MPT							
CALIBRATION RESULTS @ 27 °C :-											
1. Lower Volume 10 µl											
1	2	3	4	5	6	7	8	9	10	Mean Volume	
9.97	10.11	10.26	10.19	10.22	10.34	10.08	10.16	10.21	10.36	10.19	
Systematic Error es µl : -0.19			Error Limits (± 0.5 µl) : ± 5.0 %			Random Error in sr µl : 0.12			Error Limits (± 0.2 µl) : ± 2.0 %		
Systematic Error es in % : -1.92						Random Error in Cv in % : 1.13					
2. Middle Volume 25 µl											
1	2	3	4	5	6	7	8	9	10	Mean Volume	
25.24	25.56	25.28	25.45	25.30	25.37	25.07	25.43	24.98	25.33	25.30	
Systematic Error es µl : -0.30			Error Limits (± 0.5 µl) : ± 2.0 %			Random Error in sr µl : 0.17			Error Limits (± 0.2 µl) : ± 0.8 %		
Systematic Error es in % : -1.21						Random Error in Cv in % : 0.69					
3. Nominal Volume 50 µl											
1	2	3	4	5	6	7	8	9	10	Mean Volume	
50.18	50.29	50.10	50.46	50.58	50.35	50.50	50.35	50.31	50.48	50.36	
Systematic Error es µl : -0.36			Error Limits (± 0.5 µl) : ± 1.0 %			Random Error in sr µl : 0.15			Error Limits (± 0.2 µl) : ± 0.4 %		
Systematic Error es in % : -0.72						Random Error in Cv in % : 0.30					
Decision Rule is Applied or Not										Yes	
										No	
Conclusion /Remarks:											
The Reported Uncertainty from 10 to 50 µl is 0.32 µl, at Coverage Factor K=2, which corresponds to a confidence level at approximately 95 %											
1. The calibration results reported in this certificate are valid at the time of and the stated condition of measurement.											
2. This report is valid for Scientific & Industrial Purpose Only											
3. This report should not be reproduced except in full without our prior permission in writing.											
4. Calibration certificate without signature are not valid.											
5. This Calibration Certificate relates only to the above DUC											
6. DUC : Device under calibration											
7. All the measurements are traceable to SI units through unbroken chain of calibration from the competent laboratories as per ISO/IEC/17025 standard requirements.											
Calibrated by 						 Issued / Approved By (APPU K MANI) (Technical Director)					



CALIBRATION CERTIFICATE				
UNIQUE LAB REPORT NO (ULR NO)		CC310223000000826F		
SRF NO.	062	CERTIFICATE NO	UCSL/02-23/062_02	
Customer Details	M/s. ICTC TALUK HOSPITAL KATTAPANA, IDUKKI, KERALA, INDIA			
Device Under Calibration	CENTRIFUGE(RPM)		Equipment & Master Used For calibration	
Make / Model No.	ROTEK		01.DIGITAL TACHOMETER	
Range	0 - 5 rpm		Make : LUTRON	
Least Count	1 rpm		Serial No. : S014996	
Instrument Id. No.	--		Certificate No. : C-220712-5-6	
Instrument Sr. No.	09309		Next Due Date : 15.07.2023	
Location	LAB		Calibrated By : Godrej & Boyce	
Visual Inspection	OK		Accreditation No : CC-2559	
Material Receipt Date	---			
Calibration Performed at	ON SITE			
Date of Calibration	25.02.2023			
Next Calibration Due (as per customer request)	25.02.2024			
Calibration Certificate Issue Date	02.03.2023			
Discipline	MECHANICAL			
Method used	COMPARISON METHOD			
ENVIRONMENTAL CONDITION				
Temperature	25.1 °C			
Relative Humidity	55 %RH			
Condition Of Equipment :	Un-Loaded			
OBSERVATION RESULTS				
SL NO.	Nominal Value on UUC (rpm)	Observed Mean Value on MASTER (rpm)	Error (±)	± Expanded Uncertainty At 95% Confidence Level (k=2)
1.	1.0	1.0	0.00	0.6 %
2.	2.0	2.0	0.01	0.6 %
3.	3.0	3.0	0.01	0.6 %
4.	4.0	4.1	0.01	0.6 %
5.	5.0	5.1	0.02	0.6 %
Decision Rule is Applied or Not :			Yes	No
				✓
Calibration Procedure Based On		: UCSL/SOP/RPM		
NOTE :-				
1. The calibration results reported in this certificate are valid at the time of and the stated condition of measurement.				
2. This report should not be reproduced except in full without our prior permission in writing.				
3. Calibration certificate without signature are not valid.				
4. All the measurements are traceable to SI units through unbroken chain of calibration from the competent laboratories as per ISO/IEC/17025 standard requirements.				
5. This Calibration Certificate relates only to the above DUC.				
6. DUC : Device under calibration.				
7. Reported readings for both DUC and Master are average of 5 measurements.				
Calibrated By				
			Issued / Approved By (APPU K MANI) Technical Director	

