RK QUALITY MEASUREMENT SERVICES PRIVATE LIMITED

(Formerly known as RK Technologies)

Calibration and Validation Services

Add : Flat No.302, Third Floor, Krishna Pride Apartment, Sadguru Nagar, Pathardi Gaon, Nashik-422 010.
Mob.: +91 9028646172, +91 9028777244 0253 4034044
E-mail : rktechnologies99@gmail.com
Website : www.rktechcalibration.com

Calibration of Electro Technical, Thermal, Pressure, Dimensional, Volume, Sound & RPM Parameters.

NABL ACCREDITED CALIBRATION LABORATORY
as per ISO/ IEC 17025 : 2017 With vide certificate No. CC-2497

CC-2497

CALIBRATION CERTIFICATE

Calibration Item	Micropipette	Certificate No	RK/24/195-01

Date of Receipt	Date of Calibration	Next Recommended Due Date	Certificate Issue Date	Page No
16 October 2024	17 October 2024	16 October 2025	18 October 2024	01 of 01

I. Customer Name & Address	HOFFEN DIAGNOSTICS BAVDHAN, PUNE Customer Reference Through: M/s GLOBAL TECHNICAL SERVICES PUNE

II. Description of Item Under Calibration :

Instrument ID No	HOF - 07	Range	5 to 50 µl
Make/Model	ERBA	Resolution	0.5 µl
Serial No.	QC 582298	Location	LAB
Type	Variable	Department	Pathology

III Environment Condition:

Temperature Air	27 ± 3 °C Water : 24.3°C	Work Instruction No	RK-WI-68
Relative Humidity	50 % to 60 % rh	Discipline	Mechanical Volume
Location of Calibration	In Lab	Z Correction Factor (µl/mg)	1.0045 / Air Pressure : 943 hPa
ULR NO.	CC249724000001621F	Condition of Receipt Item	Good

IV. Detail of Reference Standard used for calibration (Traceable To National / International Standard)

Instrument Name	ID No	Traceability (Cert No)	Date of Calibration	Valid upto	Traceability
Digital Weighing Balance	RK-STD-38	CAL/24-25/CC/0022-1	09 April 2024	8 April 2025	NABL, CC-2248

V: Calibration Result :

Calibration Range	Set UUC Reading	Measure Standard Reading @ 27 °C	Systematic Error	± Expanded Uncertainty
µl	µl	µl	µl	µl
5 to 50 µl	20	19.93	0.07	0.78
	30	29.89	0.11	0.78
	50	49.81	0.19	0.78

The reported uncertainty is the expanded uncertainty in measurement obtained by multiplying the standard uncertainty by the coverage factor k=2, which corresponds to a coverage probability of approximately 95% for normal distribution

VI : Note:

1) UUC stands for Unit Under Calibration.
2) Next calibration date (1 Year) mentioned in the certificate is given as per customer request
3) This certificate refers only to the particular item submitted for calibration
4) This certificate shall not be reproduced, except in full unless written permission for the publication of an approved abstract has been obtained from the Technical Manager of "RK QUALITY MEASUREMENT SERVICES PVT LTD".
5) The calibration results reported in the certificate are valid at the time of and under the stated conditions of measurement.

RK QUALITY MEASUREMENT SERVICES PVT LTD. NASHIK 422010

Calibrated By
Mr. Yogesh Berad
Calibration Engineer

Review & Approved By
Mr. Rahul Kasture
Technical Manager

********** End of Report **********

Format No. RKF - 31

Nashik Engineering Cluster

(Under the aegis of Department of Industrial Policy & Promotion, (DIPP), Ministry of Commerce & Industry, Govt. of India, New Delhi)

NABL Accredited Testing & Calibration Laboratory as per ISO/IEC:17025:2017, Test House approval from Directorate General of Aeronautical Quality Assurance (DGAQA), Ministry of Defence, Govt. of India, New Delhi

CC-2248

" Sahastrarashmi", C-10, MIDC, Ambad, Nashik-422 010. Tel.: +91 253 6699231,32,91 TeleFax: + 91 253 6699222
E-mail : calibration@nec.org.in, quality.lab@nec.org.in, testinglab@nec.org.in, info@nec.org.in, website: www.nec.org.in

CALIBRATION CERTIFICATE		Certificate No. CAL/24-25/CC/0022-1	
		ULR No. CC224824000001549F	
WEIGHING BALANCE		Date of Issue 10.04.2024	
Date of Calibration 09.04.2024	Next Calibration Due Date 08.04.2025	Page No. 1	No. of Pages 4

Calibrated For	**M/s.RK Quality Measurement Services Pvt. Ltd Flat No.302,Third Floor,Krishna Pride Apartment,Sadguru Nagar Lane No.3, B/H Rudra Hight Apartment,Pathardi Gaon,Nashik-422010.**
Date of Receipt of Instrument	09.04.2024
Condition of the Instrument on Receipt	Functional
Calibrated at	Onsite
SRF No.	CAL/24-25/CSRF/0022 **SRF DATE :-** 09.04.2024
NEC ID No.	CAL/24-25/ID/0022-1
Details of Test Instrument	
Description	WEIGHING BALANCE
Make / Type	Radwag/Digital
Model	AS82/220.R2 PLUS
Serial No.	668681
ID No.	RK-STD-38
Capacity (max)	82 g / 220 g
Capacity (min)	0.001 g
Resolution	0.00001 g / 0.0001 g
Accuracy	Class I
e Value	0.0001 g / 0.001 g
Calibration Procedure No.	WI/NEC/CAL/MECH/14
Reference Standard	OIML-R-76:2006
Calibration Environments	
Temperature	23 ± 1°C
Relative Humidity	50 ± 10 % RH

Reference Standard Used For Calibration (Traceable To National / International Standards)

Description	Make/Model	Sr/No.	Cal. Cert No.	Valid upto	Traceability
Weight Box (E1 Class)	Weigh India	NEC/CAL/M-17	TSC/23-24/6985-1	24.07.2025	Transcal, Banglore.

Note: 1) Calibration results are enclosed on page no. 2 & onwards.
2) Next calibration date(1 Year) mentioned in the certificate as per customer request.
3) The calibration certificate pertains to the above equipment calibration.
4) The calibration certificate shall not be reproduced except in full,without written approval of the laboratory.

NASHIK ENGINEERING CLUSTER * CALIBRATION LAB * AMBAD, NASHIK

Calibrated By
Kunal Shejwal
(Calibration Engineer)

Reviewed & Approved By
Rahul Golesar
(Quality Manager)

QR/NEC/CC/01

Nashik Engineering Cluster

(Under the aegis of Department of Industrial Policy & Promotion, (DIPP), Ministry of Commerce & Industry, Govt. of India, New Delhi)

NABL Accredited Testing & Calibration Laboratory as per ISO/IEC:17025:2017, Test House approval from Directorate General of Aeronautical Quality Assurance (DGAQA), Ministry of Defence, Govt. of India, New Delhi

CC-2248

" Sahastrarashmi", C-10, MIDC, Ambad, Nashik-422 010. Tel.: +91 253 6699231,32,91 TeleFax: + 91 253 6699222
E-mail : calibration@nec.org.in, quality.lab@nec.org.in, testinglab@nec.org.in, info@nec.org.in, website: www.nec.org.in

CALIBRATION CERTIFICATE		Certificate No. CAL/24-25/CC/0022-1	
		ULR No. CC224824000001549F	
WEIGHING BALANCE		Date of Issue 10.04.2024	
Date of Calibration 09.04.2024	Next Calibration Due Date 08.04.2025	Page No. 2	No. of Pages 4

Discipline - Mechanical
Sub - Discipline - Mass (Weighing Balance)

CALIBRATION RESULT :-
A) Linearity Test

Load (L) in 'g'	Certified Value of Weight in 'g' (L)	Balance Reading (I) in 'g'		Error (E = I-L) in 'g'		+/- MPE	EXP.Unc in 'g'
		Increase	Decrease	Increase	Decrease		
0.000	0.0000000	0.00000	0.00000	0.000000	0.000000	0.00005	0.00000
0.001	0.0010001	0.00099	0.00099	-0.000010	-0.000010	0.00005	0.00001
0.002	0.0019997	0.00199	0.00201	-0.000010	0.000010	0.00005	0.00001
0.002*	0.0019999	0.00199	0.00201	-0.000010	0.000010	0.00005	0.00001
0.005	0.0049993	0.00498	0.00498	-0.000019	-0.000019	0.00005	0.00001
0.01	0.0099998	0.00999	0.00998	-0.000010	-0.000020	0.00005	0.00001
0.02	0.0199998	0.01998	0.01998	-0.000020	-0.000020	0.00005	0.00001
0.02*	0.0200007	0.02002	0.02003	0.000019	0.000029	0.00005	0.00001
0.05	0.0500013	0.04998	0.04998	-0.000021	-0.000021	0.00005	0.00001
0.1	0.1000004	0.10002	0.10003	0.000020	0.000030	0.00005	0.00001
0.2	0.2000007	0.20003	0.20003	0.000029	0.000029	0.00005	0.00001
0.2*	0.2000003	0.19998	0.19997	-0.000020	-0.000030	0.00005	0.00001
0.5	0.5000018	0.50003	0.50002	0.000028	0.000018	0.00005	0.00001
1	1.000006	0.99998	0.99998	-0.000026	-0.000026	0.00005	0.00001
2	2.000001	1.99998	1.99997	-0.000021	-0.000031	0.00005	0.00001
2*	2.000007	2.00003	2.00002	0.000023	0.000013	0.00005	0.00001
5	5.000008	5.00002	5.00003	0.000012	0.000022	0.00005	0.00001
10	10.000008	10.00003	10.00003	0.000022	0.000022	0.00010	0.00001
20	19.999995	19.99997	19.99998	-0.000025	-0.000015	0.00010	0.00001
20*	20.000008	19.99998	19.99998	-0.000028	-0.000028	0.00010	0.00001
50	50.00001	50.00003	50.00002	0.000020	0.000010	0.00015	0.00001
100	100.00000	99.9999	99.9999	-0.000100	-0.000100	0.001	0.00025
200	199.99998	199.9998	199.9999	-0.000180	-0.000080	0.001	0.00025
200*	200.00001	199.9999	199.9999	-0.000110	-0.000110	0.001	0.00025

NASHIK ENGINEERING CLUSTER CALIBRATION LAB AMBAD, NASHIK

Calibrated By
Kunal Shejwal
(Calibration Engineer)

Reviewed & Approved By
Rahul Golesar
(Quality Manager)

Nashik Engineering Cluster

(Under the aegis of Department of Industrial Policy & Promotion, (DIPP), Ministry of Commerce & Industry, Govt. of India, New Delhi)

NABL Accredited Testing & Calibration Laboratory as per ISO/IEC:17025:2017, Test House approval from Directorate General of Aeronautical Quality Assurance (DGAQA), Ministry of Defence, Govt. of India, New Delhi

CC-2248

" Sahastrarashmi", C-10, MIDC, Ambad, Nashik-422 010. Tel.: +91 253 6699231,32,91 TeleFax: + 91 253 6699222
E-mail : calibration@nec.org.in, quality.lab@nec.org.in, testinglab@nec.org.in, info@nec.org.in, website: www.nec.org.in

CALIBRATION CERTIFICATE		Certificate No. **CAL/24-25/CC/0022-1**	
		ULR No. **CC224824000001549F**	
WEIGHING BALANCE		Date of Issue **10.04.2024**	
Date of Calibration **09.04.2024**	Next Calibration Due Date **08.04.2025**	Page No. **3**	No. of Pages **4**

Discipline - Mechanical
Sub - Discipline - Mass (Weighing Balance)

CALIBRATION RESULT :-
B) Repetability Test : P = I + e/2

Full Load = 200.0000 /g		**Half Load = 100.0000 /g**	
Balance Readings(I) in 'g'	**(P) in'g'**	**Balance Readings (I) in 'g'**	**(P) in'g'**
199.9999	200.00040	99.9999	100.00040
199.9999	200.00040	99.9999	100.00040
199.9999	200.00040	99.9999	100.00040
199.9999	200.00040	99.9999	100.00040
199.9999	200.00040	99.9999	100.00040
199.9999	200.00040	99.9999	100.00040
199.9999	200.00040	99.9999	100.00040
199.9999	200.00040	99.9999	100.00040
199.9999	200.00040	99.9999	100.00040
199.9999	200.00040	99.9999	100.00040

MPE = 0.001 **MPE =** 0.001

Full Load ('P'Max-'P'Min)= 0.0000 g **Half Load ('P'Max-'P'Min)= 0.0000 g**

NASHIK ENGINEERING CLUSTER CALIBRATION LAB AMBAD NASHIK

Calibrated By
Kunal Shejwal
(Calibration Engineer)

Reviewed & Approved By
Rahul Golesar
(Quality Manager)

Nashik Engineering Cluster

(Under the aegis of Department of Industrial Policy & Promotion, (DIPP), Ministry of Commerce & Industry, Govt. of India, New Delhi)

NABL Accredited Testing & Calibration Laboratory as per ISO/IEC:17025:2017, Test House approval from Directorate General of Aeronautical Quality Assurance (DGAQA), Ministry of Defence, Govt. of India, New Delhi

CC-2248

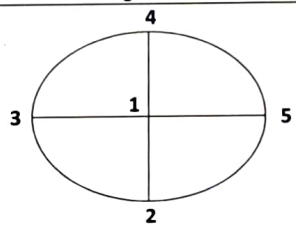
" Sahastrarashmi", C-10, MIDC, Ambad, Nashik-422 010. Tel.: +91 253 6699231,32,91 TeleFax: + 91 253 6699222
E-mail : calibration@nec.org.in, quality.lab@nec.org.in, testinglab@nec.org.in, info@nec.org.in, website: www.nec.org.in

CALIBRATION CERTIFICATE		Certificate No. CAL/24-25/CC/0022-1	
		ULR No. CC224824000001549F	
WEIGHING BALANCE		Date of Issue 10.04.2024	
Date of Calibration 09.04.2024	Next Calibration Due Date 08.04.2025	Page No. 4	No. of Pages 4

Discipline - Mechanical
Sub - Discipline - Mass (Weighing Balance)

CALIBRATION RESULT :-

C) Eccentricity Test (At 30 % of Full Load) :- 50.00000 g No Load :- 0.00000 g



Load(L) g	Location	Balance Reading (I) g	Error (Ec) g	+/- MPE g
50	1	49.9999	-0.00010	0.00005
50	2	49.9999	-0.00010	0.00005
50	3	49.9998	-0.00020	0.00005
50	4	49.9999	-0.00010	0.00005
50	5	49.9999	-0.00010	0.00005
50	1	49.9998	-0.00020	0.00005
50	5	49.9999	-0.00010	0.00005
50	4	49.9999	-0.00010	0.00005
50	3	49.9998	-0.00020	0.00005
50	2	49.9999	-0.00010	0.00005
50	1	49.9999	-0.00010	0.00005

The Expanded Uncertainty of Balance Under Calibration for range 0 to 82 g is 0.00001 g & Range 82 g to 220 g is 0.00025 g .

Remarks:

1) Uncertainty has been calculated for a coverage factor k=2 corresponding to approximately 95.45 % Confidence Level.
2) The Standard maintained are traceable to National / International Standard through accredited Laboratories.
3) The observations reported represent values at the time of the measurements, and under the stated conditions. they do not convey any long term stability information.

NASHIK ENGINEERING CLUSTER CALIBRATION LAB AMBAD NASHIK

Calibrated By
Kunal Shejwal
(Calibration Engineer)

Reviewed & Approved By
Rahul Golesar
(Quality Manager)

***** End of Certificate *****