



Indian Calibration Services

An Exclusive House for Validation & Calibration of Analytical Instruments
 304 & 313, Laxmi Deep, District Centre, Near Nirman Vihar Metro Station, Laxmi Nagar, Delhi-110092
 Phone / Fax : (011) 22453259, 22434362, 9599482307
 E-mail : indiancalibrationservices@gmail.com Website : www.multitechics.com

CALIBRATION CERTIFICATE

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CALIBRATION CERTIFICATE OF MICROPIPETTE

Certificate No:	22700014912	Issued On:	15/10/2022
ULR No:	CC214622700014912F	Calibration Date:	13/10/2022
Job Identification No:	ICS/C/MVD/10/14912	Next Calibration Date:	12/10/2023
Ref. No:	SRF- Dated: 11/07/2022		

CALIBRATED FOR: M/s Lifecell International Pvt. Ltd.
 Plot No. 333, First Floor, Niti Khand-02,
 Indrapuram, Ghaziabad, U.P. -201014.

EQUIPMENT DESCRIPTION

Name	Variable Micropipette		
Make/Model	Dragon Lab	Visual Inspection	Ok
Serial No.	YE218AS0299031	I.D. No.	---
Range	10 µl - 100 µl	Least Count	1 µl
Location		Calibration Site	In-Lab

ENVIRONMENTAL CONDITIONS

Temperature	25.0 °C ± 3.0 °C	Humidity	50 ± 10 % RH
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STANDARD REFERENCE DETAILS Traceable to National / International Standard

Name	Make	Certificate No.	Calibration Agency	Calibration Date	Valid Upto
Stainless Steel Wire Weights	Weightronics	WMCL/E/2020-05/3364	WMCL	31/05/2020	30/05/2023

USED EQUIPMENT DETAILS	Calibrated Balance, Distilled Water & Glass wares
PRINCIPLE/METHODOLOGY OF CALIBRATION:	As per Calibration Procedure No.: ICS/CAL/SOP-M03 (Gravimetric Method), ISO 8655-6

RESULTS: Mechanical Calibration
 Below Volume is determined at 27°C

U.U.C. Reading (in ml)	Standard Measured Volume (in ml) (Average)	Uncertainty at approx 95% C.L and coverage factor k=2
0.010 (010 µl)	0.009986 (0009.986 µl)	± 0.83 µl
0.050 (050 µl)	0.049957 (0049.957 µl)	± 0.83 µl
0.100 (100 µl)	0.099935 (0099.935 µl)	± 0.83 µl

REMARKS: The recommended date for next calibration is mentioned, as asked by the customer.

END OF REPORT

Lifecell International Pvt. Ltd.
 15/10/2022
 For and on behalf of
 Indian Calibration Services

- Note:**
- This report is not to be reproduced wholly or in part and cannot be used as an evidence in the Court of Law and should not be used in any advertising media without our special permission in writing.
 - The result listed refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
 - Total liability of our Organisation is limited to the invoiced amount.
 - Samples will be destroyed after one month from the date of issue of Calibration Certificate unless otherwise specified.
 - In case any reconfirmation of contents of this Calibration Certificate is required. Please contact our office.
 - The calibration certificate/Test Report is valid only for the condition of the UUC at the time under stated condition of calibration.

Checked by: *[Signature]*
 Authorised Signature: *[Signature]*
 Operation Head



D-46, Sector - 4, DSIDC, Bawana, Delhi - 110 038, INDIA.
 Phone : +91 - 11 - 2776 1662, 2776 2663
 E-mail : Info@weightronics.net, Web : www.weightronics.net

Calibration Certificate

NABL/ILAC/0115 CG-2743
 Format No.: 7.8-QF-02

Issue Dated: 01-06-2020

Recommended Date for the Next Calibration Mentioned As Per Request of the Customer	Page	No. of Pages
Date: 30-05-2023	-1-	-2-

Certificate No.: WMCL/E/2020-05/3364
 ULR - CC274320000000864F

Date of Calibration: 31-05-2020

Calibrated for

INDIAN CALIBRATION SERVICES
 304 & 313, Laxmi Deep,
 District Center, Laxmi Nagar,
 Near Nirman Vihar Metro Station,
 Delhi - 110 092, INDIA

Customer Reference

RGP No.: NIL, Dated: 21/05/2020

Description of Instrument
 0.5 g to 0.001 g

Make - "WEIGHTRONICS"
 Stainless Steel Wire Type Weights

Identification No

WT/AS-I/2015/2423

Assumed Density (d)

(7 950 ± 50) kg/m³; (k=2) for Stainless Steel

Environmental Conditions

Temperature : (23.0 ± 2.0)°C
 Relative Humidity : (50.0 ± 10.0) %
 [Change in Temperature and Relative Humidity during the calibration were less than ± 0.3°C per hour and ± 5.0 % per 4 hours respectively]

Standard (s) used

WMCL working standard of mass with uncertainty Better than one-third of the reported uncertainty of measurement

Traceability Standard (s)

The Standard used for Calibration are Traceable from "NPL" New Delhi, INDIA vide Calibration Certificate No.: 19100739/D1.01/C-117, Dated: 11/12/2019 valid up to Dated: 11/12/2022

Balance used for Calibration

Precision Balances of Appropriate Accuracy Traceable to Mass Standards

Methodology of Calibration Adopted

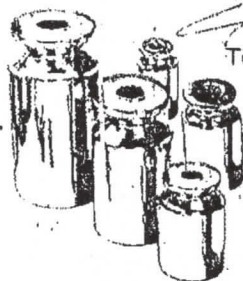
The Method of comparison with standard (s) using Sub - Division Weighing Method from 1 mg to 500 mg (Cal. Procedure No.: WMCL/ Doc-13/Cal- PR-03) and (ABBA or ABA) Weighing Cycle. The Reported Mass Value(s) is (are) the conventional mass value(s) (M_c) related to the true mass value(s) (M_T) by formula: M_c = M_T [1 - 1.2(1/d - 1/8000)]. (Where, 'd' is in kg/m³).

Calibrated by:

Arun Pathak
 Technical Manager

Issued by:

Lalit Shukla (Q.M.)
 Authorized Signatory





NABL/ILAC/0115

CC-2743

Format No.: 7.8-QF-02

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 Phone : +91 - 11 - 2776 1662, 2776 2663
 E-mail : info@weightronics.net, Web : www.weightronics.net

Calibration Certificate

Issue Dated: 01-06-2020

Recommended Date for the Next Calibration Mentioned As Per Request of the Customer Date: 30-05-2023	Page	No. of Pages
	-2-	-2-

Certificate No.: WMCL/E/2020-05/3364
 ULR - CC27432000000864F

Date of Calibration: 31-05-2020

Results:

Sr. No.	Denomination	Mass Value (g)	Uncertainty (+g)
12	500 mg	0.499 995	0.000 002
11	200 mg	0.200 002	0.000 002
10	200 mg *	0.200 000	0.000 002
9	100 mg	0.100 000	0.000 001
8	50 mg	0.049 998	0.000 001
7	20 mg	0.020 000	0.000 001
6	20 mg *	0.019 998	0.000 001
5	10 mg	0.009 999	0.000 001
4	5 mg	0.005 001	0.000 001
3	2 mg	0.002 000	0.000 001
2	2 mg *	0.001 999	0.000 001
1	1 mg	0.001 000	0.000 001

Remarks: Mass Values of all the weights are conventional mass values and within the maximum errors permissible in "E₁" Accuracy Class of Weights as per OIML R 111-1:2004.

The Reported uncertainty is at coverage factor $k=2$ which corresponds to a coverage probability of approximately 95% for a normal distribution. The contribution of uncertainty originating from the standard used, the weighing process, drift in standard and the air buoyancy correction are taken in to account.

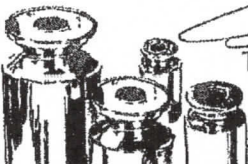
Notes: This Calibration Certificate may not be reproduced except in full, unless written Permission for Publication of an approved extract has been obtained from the Laboratory (WMCL). The Calibration results reported in this Certificate are valid at the time of and under the stated conditions of measurement. The Calibration Certificate issued for Weights used for Scientific or Industrial purposes only. Star Mark (*) are used to distinguish the weights of same nominal value.

Calibrated by:

Arun Pathak
 Arun Pathak
 Technical Manager

Issued by:

Lalit Shukla
 Lalit Shukla (Q.M.)
 Authorized Signatory



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फ्लूइड कंट्रोल रिसर्च इंस्टिट्यूट, पालक्काड
FLUID CONTROL RESEARCH INSTITUTE, PALAKKAD

An ISO 17025 : 2017, 9001 : 2015 Establishment

An Autonomous R&D Organisation under Ministry of Heavy Industries & Public Enterprises, Govt. of India.

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CERTIFICATE OF CALIBRATION

OF RTD SENSOR WITH DIGITAL INDICATOR FOR
M/s INDIAN CALIBRATION SERVICES,
304&313, "LAXMI DEEP", DIST CENTRE,
NEAR NIRMAN VIHAR METRO STATION,
LAXMI NAGAR, DELHI - 110 092



Certificate No:
CC-2395

ULR.No.:CC239521210000060F

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Date of Receipt	Date of Calibration	Date of Issue	Recommended Calibration Due Date	CERTIFICATE NUMBER
16-Feb-21	24-Feb-21 to 25-Feb-21	26-Feb-21	25-Feb-22	ETL/2070/21/C/F/060

U. S.

Approved Signatory

V. RADHAKRISHNAN
CHIEF RESEARCH ENGINEER

- Description & Identification of unit under calibration : RTD Sensor with Digital Indicator
Make: YUDIAN,
EQ.ID. No.: ICS/STD/01 , SI. No.: AI-5600
- Calibrated range/points : -80.00°C to 400.00°C
- Environmental conditions at the time of calibration : Temperature: 25±2°C
Relative Humidity: 60±15%
- Calibrated at : In-House/On-Site
- Standard(s) used : 1)SPRT
Make:HART SCIENTIFIC, Model: 5628
SI. No.: 0975, Due date of calibration : February, 2022
2)81/2 Digital Multimeter
Make:FLUKE, Model: 8508A
SI. No.: 160862159, Due date of calibration : July, 2021
- Traceability of standard(s) : Traceable to National standards

Calibrated by

[Signature]

Report Prepared by

[Signature]

Report Checked by

[Signature]

T V Sundaresan



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FLUID CONTROL RESEARCH INSTITUTE, PALAKKAD



Certificate No:
CC-2395

CERTIFICATE OF CALIBRATION

Certificate No. : ETL/2070/21/C/F/060

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ULR No.CC239521210000060F

7. Work procedure code (s) : WP/ETL/T02
8. Method of calibration : The UUC has been calibrated by comparison method as per FCRI work procedure code. The results are given in the following tables.

9. Results

Table 1

RTD Sensor with Digital Indicator					
Make : YUDIAN			Resolution: 0.001°C		
			EQ. ID. No. ICS/STD/01		
			Sl.No.: A1-5600		
UUC Range	UUC Temperature	Master Temperature	Observed Error	Expanded Uncertainty	Coverage factor
	x	y	x-y	U(±)	k
	(°C)	(°C)	(°C)	(°C)	
	-80.302	-80.1785	-0.1235	0.043	2.00
	-50.300	-50.1854	-0.1146	0.043	2.00
	-30.160	-30.1298	-0.0302	0.043	2.00
	-20.020	-19.9950	-0.0250	0.043	2.00
-80.000°C	0.022	0.0037	0.0183	0.043	2.00
to	25.019	24.9954	0.0236	0.043	2.00
400.000°C	50.022	49.9721	0.0499	0.043	2.00
	100.125	99.9715	0.1535	0.043	2.00
	199.702	199.9754	-0.2734	0.043	2.00
	399.051	400.6316	-1.5806	0.060	2.00

10. Remarks

The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95% for a coverage factor k = 2.00

TEMPERATURE SCALE: INTERNATIONAL TEMPERATURE SCALE - 1990

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CERTIFICATE OF CALIBRATION



Certificate No:
CC-2395