



CALIBRATION CERTIFICATE

Certificate No.	MES/21-22/GOWOCHMA/CEN/J03	Date of Issue : 06/08/2021 Calibration Done On : 03/08/2021 Calibration Due On : 02/08/2022
Customer Name	GOVERNMENT WOMEN & CHILDREN'S HOSPITAL, MATTANCHERRY, ERNAKULAM.	

DETAILS OF DEVICE UNDER CALIBRATION

Equipment Name	Make / Model	Serial No.	Asset ID	Location
Centrifuge	Remi	-	ICTC/134/KSAC.S/0 3	ICTC

DETAILS OF MASTER EQUIPMENT USED

Sl No.	Master Equipment	Make / Model	Serial No.	Reference ID	Cal. Due
1	Digital Tachometer	Equinox / EQ-801B	S916577	ACS/20-21/I02671-01	24/09/2021
2	Digital Thermo Hygrometer	Equinox & EQ - 308 CTH	20191602	ACS/JUN/21/I - 32 -01	17/06/2022

The instruments used for calibration are under valid calibration and are traceable to National Standards.

Environmental Conditions	Temperature	27°C	Relative Humidity	55 %
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PERFORMANCE DATA

Result	Obtained RPM
	917 rpm

Calibration Status	Pass	✓	Fail
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Calibrated By

Mahesh

Mahesh MC (Service Engineer)

Approved By

Binoj Thomas (Quality Manager)



CALIBRATION CERTIFICATE

Certificate Number : MES/210811/C1
 Customer Details : WOMEN & CHILDREN'S HOSPITAL, MATTANCHERY.
 Date of Calibration : 11/08/2021
 Next Calibration Due : 10/08/2022
 Date of Issue : 11/08/2021

DETAILS OF DEVICE UNDER CALIBRATION(DUC)

Nomenclature : Micropipette
 Make / Model : MICROLUX
 Equipment Condition : Good
 Range : 500 μ L
 Serial No. : NA
 ID No. : 68070020
 Resolution : 0 μ L
 Location : LAB

DETAILS OF MASTER EQUIPMENT USED

Nomenclature : Electronic Precision Balance
 Make : Boeco
 Model : BBC-22
 Certificate No. : MES/17012020/EB/C1
 Range : 0 - 210 gm
 Readability : 0.01/0.1 mg
 Serial No. : 27104178
 Calibration Due Date : 14.01.2022

ENVIRONMENTAL CONDITIONS

Temperature(°C)	Relative Humidity (%)	Atmospheric Pressure (mbar)	Water Temperature(°C)
27.1	56	1024	27.2

CALIBRATION RESULTS

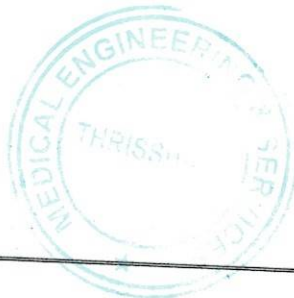
Discipline : Mechanical		Parameter	Volume
Sl no	Set volume	Actual volume	Expanded uncertainty
1	500 μ l	501.30 μ l	\pm 1.183

Notes:-

- The results in this certificate are only related to DUC submitted calibration and valid at the time of calibration under stated condition of measurements
- The measurement uncertainty is estimated at a confidence level of 95.45% with coverage factor k=2.
- Results in this certificate shall not be reproduced except in full without the written approval of this centre.
- Next calibration due date is mentioned as per customer requirement.
- Calibration certificate issued for scientific or industrial purpose only.
- Calibration is carried out as per ISO 8655-6 Guidelines; MES work procedure: MES/WP/VOLUME.

Calibrated by

Prabin KP
 (Calibration Engineer)



Authorized Signatory

Binoj Thomas
 (Technical Manager)



Medical Engineering & Services

Things Beyond Thoughts

ISO 9001-2015 certified company

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Visit us @www.mescalibration.com



CALIBRATION CERTIFICATE

Certificate Number : MES/210811/C2
 Customer Details : WOMEN & CHILDREN'S HOSPITAL, MATTANCHERY.
 Date of Calibration : 11/08/2021
 Next Calibration Due : 10/08/2022
 Date of Issue : 11/08/2021

DETAILS OF DEVICE UNDER CALIBRATION(DUC)

Nomenclature : Micropipette
 Make / Model : THERMO SCIENTIFIC
 Equipment Condition : Good
 Range : 5-50 μ L
 Serial No. : LW00026
 ID No. : 68070024
 Resolution : 0.1 μ L
 Location : LAB

DETAILS OF MASTER EQUIPMENT USED

Nomenclature : Electronic Precision Balance
 Make : Boeco
 Model : BBC-22
 Certificate No. : MES/17012020/EB/C1
 Range : 0 - 210 gm
 Readability : 0.01/0.1 mg
 SerialNo. : 27104178
 Calibration Due Date : 14.01.2022

ENVIRONMENTAL CONDITIONS

Temperature($^{\circ}$ C)	Relative Humidity (%)	Atmospheric Pressure (mbar)	Water Temperature($^{\circ}$ C)
27.1	56	1024	27.2

CALIBRATION RESULTS

Discipline	Mechanical	Parameter	Volume
Sl no	Set volume μ l	Actual volume μ l	Expanded uncertainty $\pm \mu$ l
1	5	4.90	± 0.113
2	25	25.01	± 0.121
3	50	50.22	± 0.343

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Calibrated by

Prabin KP
(Calibration Engineer)

Authorized Signatory

Binoj Thomas
(Technical Manager)





CALIBRATION CERTIFICATE

Certificate Number : MES/210811/C3
Customer Details : WOMEN & CHILDREN'S HOSPITAL,MATTANCHERY.
Date of Calibration : 11/08/2021
Next Calibration Due : 10/08/2022
Date of Issue : 11/08/2021

DETAILS OF DEVICE UNDER CALIBRATION(DUC)

Nomenclature : Micropipette Serial No. : -
Make / Model : JAYNA ID No. : -
Equipment Condition : Good Resolution : 1 µL
Range : 10-100µL Location : ICTC LAB

DETAILS OF MASTER EQUIPMENT USED

Nomenclature : Electronic Precision Balance Range : 0 – 210 gm
Make : Boeco Readability : 0.01/0.1 mg
Model : BBC-22 SerialNo. : 27104178
Certificate No. : MES/17012020/EB/C1 Calibration Due Date : 14.01.2022

ENVIRONMENTAL CONDITIONS

Temperature(°C)	Relative Humidity (%)	Atmospheric Pressure (mbar)	Water Temperature(°C)
27.1	56	1024	27.2

CALIBRATION RESULTS

Discipline	Mechanical	Parameter	Volume
Sl no	Set volume µl	Actual volume µl	Expanded uncertainty ± µl
1	10	9.79	± 0.836
2	50	50.16	± 0.837
3	100	100.48	± 0.851

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- Calibration certificate issued for scientific or industrial purpose only.
- Calibration is carried out as per ISO 8655-6 Guidelines;MES work procedure: MES/WP/VOLUME.

Calibrated by

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(Calibration Engineer)



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CALIBRATION CERTIFICATE

Certificate Number : MES/210811/C4
 Customer Details : WOMEN & CHILDREN'S HOSPITAL, MATTANCHERY.
 Date of Calibration : 11/08/2021
 Next Calibration :
 Due : 10/08/2022 Date of Issue : 11/08/2021

DETAILS OF DEVICE UNDER CALIBRATION(DUC)

Nomenclature : Micropipette Serial No. : -
 Make / Model : MICROLUX ID No. : -
 Equipment Condition : Good Resolution : 1 μ L
 Range : 10-100 μ L Location : LAB

DETAILS OF MASTER EQUIPMENT USED

Nomenclature : Electronic Precision Balance Range : 0 – 210 gm
 Make : Boeco Readability : 0.01/0.1 mg
 Model : BBC-22 SerialNo. : 27104178
 Certificate No. : MES/17012020/EB/C1 Calibration Due Date : 14.01.2022

ENVIRONMENTAL CONDITIONS

Temperature(°C)	Relative Humidity (%)	Atmospheric Pressure (mbar)	Water Temperature(°C)
27.1	56	1024	27.2

CALIBRATION RESULTS

Discipline	Mechanical	Parameter	Volume
SI no	μ l	μ l	$\pm \mu$ l
1	10	9.81	± 0.83
2	50	50.18	± 0.837
3	100	100.50	± 0.855

Notes:-

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Calibrated by

Prabin KP
(Calibration Engineer)



Authorized Signatory

Binoj Thomas
(Technical Manager)



CALIBRATION CERTIFICATE

Certificate Number	: MES/210811/C5
Customer Details	: WOMEN & CHILDREN'S HOSPITAL, MATTANCHERY.
Date of Calibration	: 11/08/2021
Next Calibration Due	: 10/08/2022
Date of Issue	: 11/08/2021

DETAILS OF DEVICE UNDER CALIBRATION(DUC)

Nomenclature	: Micropipette	Serial No.	: LW00050
Make / Model	: THERMO SCIENTIFIC	ID No.	: 68070025
Equipment Condition	: Good	Resolution	: 1µL
Range	: 5-50µL	Location	: LAB

DETAILS OF MASTER EQUIPMENT USED

Nomenclature	: Electronic Precision Balance	Range	: 0 – 210 gm
Make	: Boeco	Readability	: 0.01/0.1 mg
Model	: BBC-22	SerialNo.	: 27104178
Certificate No.	: MES/17012020/EB/C1	Calibration Due Date	: 14.01.2022

ENVIRONMENTAL CONDITIONS

Temperature(°C)	Relative Humidity (%)	Atmospheric Pressure (mbar)	Water Temperature(°C)
27.1	56	1024	27.2

CALIBRATION RESULTS

Discipline	Mechanical	Parameter	Volume
Sl no	µl	µl	± µl
1	5	4.91	± 0.131
2	25	25.01	± 0.132
3	50	50.11	± 0.231

Notes:-

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