



COMMITTED TO THE
CUSTOMER SINCE - 1996

Vaidyanatheshwara INSTRUMENTS

CERTIFICATE OF CALIBRATION



CC-2473



No. 301/A, 9th Main Road, 3rd Cross, Rajiv Gandhi Nagar, J.B. Kaval, Nandhini Layout Post, Bangalore - 560 096.
Ph : 080-23377266, Mob : 9986586789 / 9632221171 / 9964308118 | Email : info@viplgroup.com Web : www.viplgroup.com

NABL Accredited Calibration Lab as per ISO/IEC 17025 : 2017 With vide Certificate No: CC-2473

1 Name and Address of Customer

M/s.: Mag Engineering

(A Unit of Sandhar Technologies Ltd.,) No. 46/A, 3rd Main,
2nd Phase, Peenya Industrial Area, Bangalore - 560 058.

Page 1 of 8

2 Customer Reference

2.1 ULR No. : CC247323500027172F
2.2 SRF No : 3738
2.3 Certificate No. : VI/22-23/3738-02
2.4 Format No : VI-FRM-ME-035
2.5 Date of Issue : 15-03-2023

3 Details Of Device Under Calibration(DUC).

3.1 Nomenclature : Granite Surface Plate
3.2 Range : 1000 X 630 mm
3.3 Make : MMT
3.4 SI.No. / Id.No. : 10813 / M054
3.5 DUC Condition : Satisfactory
3.6 Calibration Procedure No. : SOP-16-31
3.7 No.of Pages : 8
3.8 Reference Document : 7327-2003
3.9 Calibration Date (Month/Date/Year) : 03-14-2023
3.10 Calibration Due Date : 03-13-2024
3.11 Calibration done at : Onsite
3.12 Instrument Location : Shop Floor
3.13 Expanded Uncertainty of Measurement : $\pm 2.0 \text{ Sqrt} ((L+W) / 150)$
at 95.45% Confidence Level with K=2

4 Environmental Condition :

Start Temperature: 23.2°C

End Temperature: 23.5°C

5 Standards Used for calibration

Sl. No.	Nomenclature	Make & Model	Sl. No.	Least Count	Certificate. No.	Validity
1	Electronic Level	Levelnic & DL-S3	793256	0.001 mm/m	22/53/01/041-S/3/096	31-07-2023

WORKING SURFACE OVERALL

Flatness : 8.4 micrometer

Grade: 1

(Allowable tolerance: 14 μm)

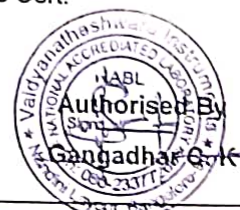
6 Note:

- The Calibration Certificate relates only to the above DUC
- Publication or reproduction of this Certificate in any form other than by complete set of the whole report & in the language, written, is not permitted without the written consent of VI.
- Corrections/erasing, invalidate the Calibration Certificate.
- Calibration of the DUC are traceable to National standards/International Standards
- Any error in this Certificate should be brought to our knowledge within 30 days from the date of this Cert.
- Results Reported are valid at the time of and under the stated conditions of measurements.
- The usage of NABL Symbol is as Per NABL Guidelines Given In NABL - 133.

Calibrated By

Madhusudhan

(Calibration Engineer)



This report refers only to the item/gauge submitted and may not be reproduced except in full without written permission from Vaidyanatheshwara Instruments Bangalore - 560096.



Vaidyanatheshwara Instruments

No.301/A, 9th main, 3rd Cross, Rajiv Gandhi Nagar,

Nandhini Layout Post, Bangalore - 560 096.

SURFACE PLATE CALIBRATION

Report No.: VI/22-23/3738-02

Date.: 3/14/2023

No. of Rows: 10

No. of Columns: 06

Measurement Reading Along Rows (Values are in Divisions)

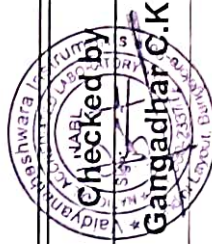
	COL1	COL2	COL3	COL4	COL5	COL6
ROW1	0	0.009	0.015	0.026	0.035	0.048
ROW2	0	0.018	0.025	0.035	0.042	0.055
ROW3	0	0.015	0.029	0.042	0.055	0.059
ROW4	0	0.009	0.018	0.023	0.029	0.035
ROW5	0	0.006	0.009	0.015	0.022	0.029
ROW6	0	0.011	0.015	0.025	0.031	0.037
ROW7	0	0.015	0.023	0.029	0.035	0.041

Maximum Deviation: 5.5

Minimum Deviation: -2.9

Calibrated by

Madhusudhan





Vaidyanatheshwara Instruments

No.201/A, 9th main, 3rd Cross, Rajiv Gandhi Nagar,

Nandhini Layout Post, Bangalore - 560 033.

SURFACE PLATE CALIBRATION

Report No.: VII22-23/3733-02

Date.: 2/14/2023

No. of Rows: 10

No. of Columns: 03

Measurement Reading Along Rows (Values are in Divisions)

ROW2	0	0.003	0.013	0.013	0.002	0.003
ROW3	0	0.004	0.003	0.011	0.015	0.013
ROW10	0	0.005	0.003	0.013	0.013	0.002

Maximum Deviation: 5.5

Minimum Deviation: -2.9

Calibrated by

Madhusudhan

Checked by

Gangadhar S K



Vaidyanatheshwara Instruments

No.301/A, 9th main, 3rd Cross, Rajiv Gandhi Nagar,

Nandhini Layout Post, Bangalore - 560 096.

SURFACE PLATE CALIBRATION

Report No.: VII/22-23/3738-02

Date.: 3/14/2023

No. of Rows: 10

No. of Columns: 06

Measurement Reading Across Rows (Values are in Divisions)

	COL1	COL2	COL3	COL4	COL5	COL6
ROW1	0	0	0	0	0	0
ROW2	0.002	0.005	0.009	0.011	0.015	0.019
ROW3	0.009	0.011	0.013	0.015	0.022	0.028
ROW4	0.005	0.009	0.015	0.021	0.028	0.035
ROW5	0.011	0.015	0.023	0.029	0.035	0.048
ROW6	0.005	0.009	0.019	0.035	0.045	0.052
ROW7	0.009	0.018	0.028	0.042	0.055	0.059

Maximum Deviation: 5.5

Minimum Deviation: -2.9

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Checked by

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Vaidyanatheshwara Instruments
No.301/A, 9th main, 3rd Cross, Rajiv Gandhi Nagar,
Nandhini Layout Post, Bangalore - 560 096.
SURFACE PLATE CALIBRATION

Report No.: VII22-23/3738-02

Date.: 3/14/2023

Measurement Reading Across Rows (Values are in Divisions)

ROW8	0.005	0.008	0.011	0.015	0.019	0.023
ROW9	0.009	0.015	0.023	0.028	0.035	0.042
ROW10	0.007	0.009	0.013	0.018	0.022	0.028

No. of Rows: 10

No. of Columns: 06

Maximum Deviation: 5.5

Minimum Deviation: -2.9

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Checked by

Gangadhar C.K



Vaidyanatheshwara Instruments

No.301/A, 9th main, 3rd Cross, Rajiv Gandhi Nagar,

Nandhini Layout Post, Bangalore - 560 096.

SURFACE PLATE CALIBRATION

Report No.: VII/22-23/3738-02

Date.: 3/14/2023

No. of Rows: 10

No. of Columns: 06

Deviation From Regression (Values are in μm)

	COL1	COL2	COL3	COL4	COL5	COL6
ROW1	4.4	1.5	-0.7	-2	-2.3	-1.3
ROW2	3.4	1	-0.5	-1.2	-1	0.4
ROW3	3	0.0	-0.0	-0.0	0.2	2.3
ROW4	2.2	-0.2	-1.8	-2.7	-2.4	-1.2
ROW5	2	-0.3	-1.9	-2.9	-2.7	-1.2
ROW6	1.2	-0.6	-1.5	-1.2	0	2.2
ROW7	0.9	-0.4	-0.3	0.8	2.8	5.5

Maximum Deviation: 5.5

Minimum Deviation: -2.9

Calibrated by

Mathusudhan

Checked by

Gangadhar C/K



Vaidyanatheshwara Instruments
No.301/A, 9th main, 3rd Cross, Rajiv Gandhi Nagar,
Nandhini Layout Post, Bangalore - 560 033.

SURFACE PLATE CALIBRATION

Report No.: VI/22-23/3738-02

Date.: 3/14/2023

No. of Rows: 10

No. of Columns: 08

Deviation From Regression (Values are in μm)

ROW8	0.1	-1.3	-1.6	-0.7	0.8	3.1
ROW9	-0.2	-1.6	-1.7	-1	0.5	2.6
ROW10	-0.8	-2.1	-2	-0.9	1	3.6

Maximum Deviation: 5.5

Minimum Deviation: -2.9

Calibrated by

Madhusudhan

Checked by

GANDHAR C.K



Vaidyanatheshwara Instruments

No.301/A, 9th main, 3rd Cross, Rajiv Gandhi Nagar,

Nandhini Layout Post, Bangalore - 560 096.

SURFACE PLATE CALIBRATION

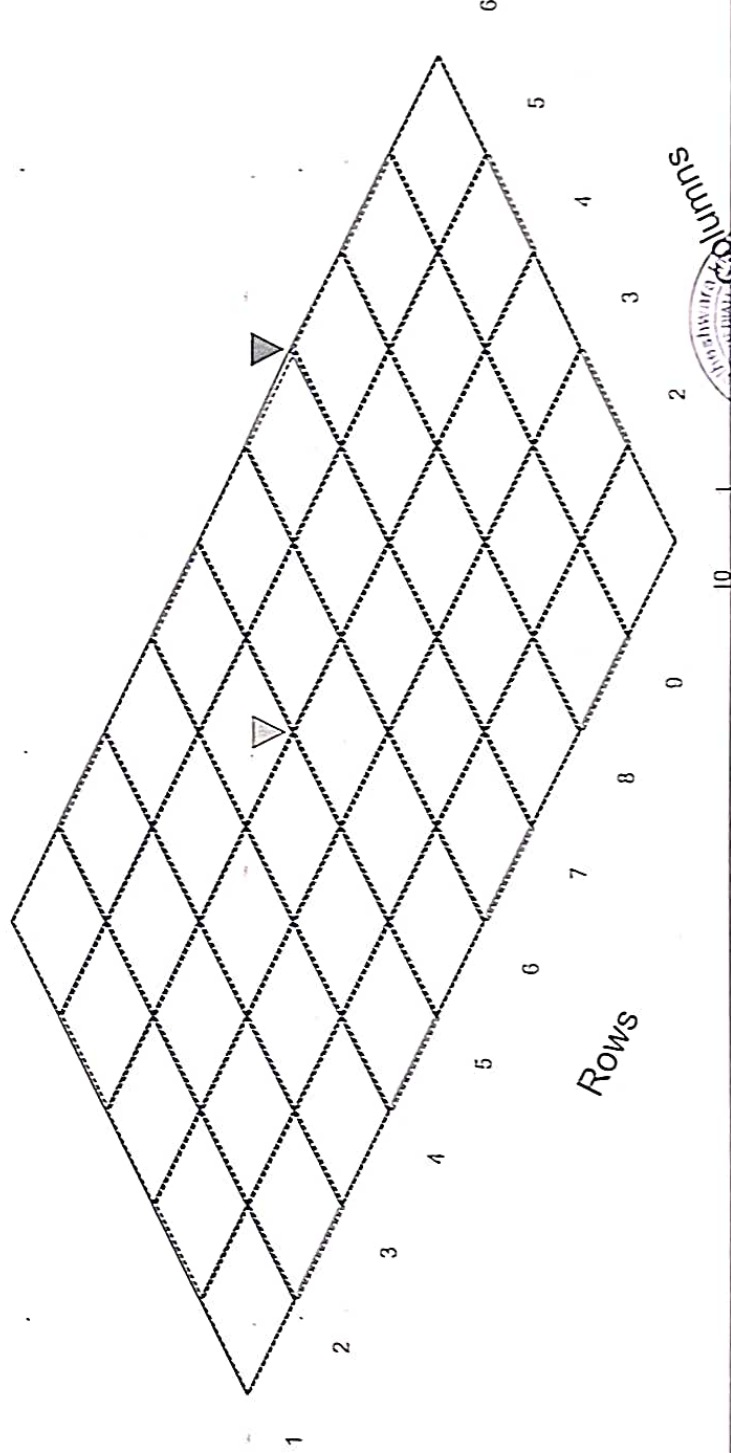
Report No.: VI/22-23/3738-02

Date.: 3/14/2023

No. of Rows: 10

No. of Columns: 06

Scale : 100



Flatness : 8.4

Maximum Deviation: 5.5

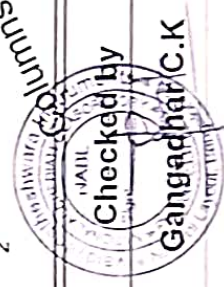
Minimum Deviation: -2.9

Calibrated by

Madhusudhan

Checked by

Gangadhar C.K



Calibration Certificate

Metrology Laboratory



CMTI

CC-2153

ULR No. CC215322000000408F

CERTIFICATE NUMBER: 22/53/01/041-S/3/096

DATE: 01-08-2022

Sheet: 1 of 3

Name & Address of the Customer : M/s. Vaidyanatheshwara Instruments,
No. 301/A, 9th Main road, 3rd Cross,
Rajiv Gandhi Nagar, J.B. Kaval,
Nandini Layout Post,
Bangalore-560 096.

Description of the item : Electronic Level,
Make: LEVELNIC,
Model: DL-S3,
Res.: 0.001 mm/m & Range: ± 2 mm/m.

Identification & Sl. No. : Idfn. No.: VI/EL/02 & Sl. No.: 793256.

1. Customer's Reference : D.C. No.: 456, Dated: 16-07-2022.

2. Date & place of Calibration : 29-07-2022 at PML.

3. Equipment Used For Calibration & Traceability:

Auto Collimator (Elcomat-2000): (Make: Moller Wedel - Germany,
Sl. No.: 171, Type: 219710, Idfn. No.: ACM-C-02) calibrated in house vide
certificate No.: ML/ACM-02/22.01/013, dated: 27-01-2022, valid up to 26-01-
2024, using masters traceable to Moller Wedel optical Germany (DAKKS
Accredited) vide certificate No.: 211124.25 3, dated: 26-11-2021.

4. Reference document : W. P. No.: QM/ML/WP/001-8.016.

5. Temperature during Calibration : 19.9° to 20.2° C.

6. Uncertainty of Measurement : $\pm 5 \mu\text{m/m}$.

(At 95 % Confidence Level
with Coverage Factor k=2)

7. Due for next Calibration : **31-07-2023**
(As requested by the Customer).

8. Results of Calibration : Refer sheets 2 & 3.

9. The reported results are valid only for the condition of the received
Electronic Level at the time of and under the stated Conditions of
Calibrations.

SADASHIVA D

Calibrated by

SHASHI KUMAR

STA GR-I

Checked by



केंद्रीय विनिर्माणकारी प्रौद्योगिकी संस्थान, बंगलूर
Central Manufacturing Technology Institute

Turnkur Road, Bengaluru - 560022, India | www.cmti-india.net | metrologylab.cmti@nic.in

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