



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.D. 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 vido Certificate No: CC-2473

1 Name and Address of the Customer

M/a: MAG ENGINEERING UNIT A
(A Unit of Sandhar Technologies Ltd.)
No. 46A, 3rd Main, 2nd Phase, Poonya,
Bangalore, Karnataka - 560 068.

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2 Customer Reference

2.1 ULR No. : CC247323100010387F
2.2 SRF No. : 8526
2.3 Certificate No. : VI/22-23/8526-14
2.4 VI Format No. : VI-FRM-ME-010
2.5 Dc No & Dc Date : SIA/RGP21-22/0365 & 13-03-2023
2.6 Date of Receipt : 14-03-2023
2.7 Date of Issue : 17-03-2023

3 Details Of Device Under Calibration(DUC)

3.1 Nomenclature : Torque Wrench
3.2 Make / Model : Mokaator / MTW 100R
3.3 SI.No. / ID No. : 121-18 / MS-11
3.4 Range/LC : 25 - 135 N-m / 5 N-m
3.5 Ref. Std. / Calibration Procedure No. : IS 16906 : 2018 / SOP-16-08
3.6 Calibration Procedure No. : SOP-16-08
3.7 No. of Pages : 2
3.8 Calibration Date : 17-03-2023
3.9 Calibration Due : 16-03-2024
4.0 Calibration done at : VI Mechanical Lab
4.1 Discipline : Mechanical (Torque)

5 Environmental Condition

Temperature 20.3-20.6 °C Humidity 53-55 %RH

6 Standards Used for calibration

Sl. No.	Nomenclature	Make & Model	Torque Sensor's Sl. No	Traceable Cert. No.	Traceable to	Validity
1	5digit Digital Motorized Torque Wrench calibration system up to 1000 Nm	Sushma & QST SA-123/ QDD- 01BV	S28-02 / S28-03	VI/22-23/INT-ME-250- 01 / 250-02	VI-Bangalore	14-07-2023

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 Lab..
- Correction/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

Hemanth Kumar G
(Calibration Engineer)

Checked By

P.Santhosh Kumar
(Lab-In-Charge)

Authorized Signatory



CERTIFICATE OF CALIBRATION



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Certificate No. VI/22-23/8525-14

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Range: 25 - 135 N-m

LC : 5 N-m

Results:

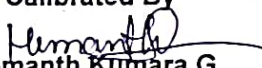
SI No.	DUC Set (N-m)	STD Reading (N-m)	Deviation Observed (N-m)	% Of Error
1	25	24.62	0.380	1.543
2	50	49.48	0.520	1.051
3	75	76.18	-1.180	-1.549
4	100	102.15	-2.150	-2.105
5	135	138.53	-2.840	-2.548


Note:


Permissible error as per IS 16906-2018 = $\leq 10 \text{ N.m} \pm 6\%$ & $> 10 \text{ N.m} \pm 4\%$ of set value.

Conclusion/ Remarks:

Uncertainty Measurement is $\pm 1.5\%$ FS at 95.45% Confidence level and Coverage Factor K = 2.

Calibrated By

Hemanth Kumara G
(Calibration Engineer)

Checked By

P.Santhosh Kumar
(Lab-In-Charge)

Authorised Signatory

Ganadhar C.K
(NABL Accredited Calibration Lab)
Nandhini Layout, Bangalore