



CALIBRATION CERTIFICATE



Work Order No. : WO/ECL/391/21-22 Certificate No. : CC/ECL/0927/21-22
Date : 29/09/2021 Date of Calibration : 01/10/2021
ULR No. : CC228721100001538F Page No. : 1 of 3
Discipline : Mechanical Calibration (Group : Acceleration and Speed)

Calibrated for : M/s. National Centre for Quality Calibration, 4, Abhishree Corporate Park, Near Swagat Bungalow BRTS, Iskcon-Ambli Road, Ambli, Ahmedabad, Gujarat - 380 058.

Calibrated at : IDEMI, Mumbai.

Description and Identification of Device Under Calibration	Standards Used for Calibration
Name : Digital Tachometer Manufacturer : M/s. Line Seiki Condition on receipt : No visible damage Range of Instrument : 6.0 to 15000.0 RPM (Contact Mode) 6.0 to 99999.9 RPM (Non-Contact Mode) Sr. No. : 184-0004 Model : TM-7010 ID No. : NCQC/M-154 Resolution : 0.1 RPM Accuracy : $\pm 0.01\% \pm 1$ Digit	Digital Tachometer with RPM Source ID No. : IDEMI/ECL/TACHO/01 Calibration Valid up to 03/03/2022 All measurement results are traceable to the International system of units (SI), ensured by comparison, directly or indirectly with National or International standards through unbroken chain of calibration

Ambient Conditions :

Temperature : 24.5 °C

Relative Humidity : 54 %

Remarks : Please refer page 2 to 3 for Calibration Results.

- 1) Procedure of Calibration : Above mentioned item is calibrated as per operating procedure : OP-S&R-01
- 2) The reported expanded uncertainty in measurement is stated as the combined standard uncertainty in measurement multiplied by the coverage factor $k = 2$, which for a normal distribution corresponds to a coverage probability of approximately 95 %.
- 3) Calibration Status : Sticker No. 927 indicating 'CAL STATUS' is affixed on instrument.
- 4) Our NABL Accreditation Certificate No. is CC - 2287, Valid up to 30/08/2023.
- 5) Next Calibration Due on : 30/09/2022

AMBEKAR PANKAJ VASUDEO
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Date: 2021.10.08 16:34:37 +05'30'
AUTHORISED SIGNATORY

NCQC System Certificate No. 55

NCQC Valid up to 30-09-2022 Reviewed

Note:

1. This certificate refers only to the particular item(s), submitted for calibration. The certificate should not be reproduced except in full without the prior permission from the Principal Director, IDEMI, Mumbai - 400 022.
2. This is computer generated certificate and may not contain signature. Where send by email, this is signed with digital signature of authorized signatory, approved by NABL. For any queries, please quote work order number mentioned in this certificate



वैद्युतिक मापन उपयंत्र अभिकल्प संस्थान, मुंबई
INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, MUMBAI

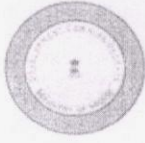
भारत सरकार की संयुक्त
सुमन तारु एवं मध्यम उद्यम मंत्रालय
Government of India Society

Ministry of Micro Small & medium Enterprises

स्वातंत्र्यवीर तात्या टोपे मार्ग, चुनाबहाती, सियॉन, प.ओ. मुंबई

Swatantryaveer Tatyta Tope Marg, Chunabhatti, Sion, P.O. Mumbai - 400 022

FF-LAB-03



Instrument Sr. No. : 184-0004
Date of Calibration : 01/10/2021
ULR No. : CC228721100001538F

Page No. : 2 of 3
Certificate No. : CC/ECL/0927/21-22

Calibration Results :

NON CONTACT MODE

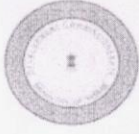
Calibration Standard		Device Under Calibration		Error		Expanded Uncertainty (±) in RPM
Range	Reading	Range	Reading	Units	% of Rdg.	
5 RPM to 200000 RPM	RPM 9.993	6.0 RPM to 99999.9 RPM	RPM 9.9	RPM -0.093	-0.931	0.5
	50.021		50.0	-0.021	-0.042	0.5
	100.03		100.0	-0.03	-0.030	0.5
	500.02		500.0	-0.02	-0.004	0.5
	1000.0		999.9	-0.1	-0.010	0.5
	5000.0		4999.8	-0.2	-0.004	2
	10000		9999.7	-0.3	-0.003	2
	30000		29999.4	-0.6	-0.002	8
	40000		39999.3	-0.7	-0.002	8
	74999		74996.6	-2.4	-0.003	10
	99899		99896.2	-2.8	-0.003	20

Note : 1) Value mentioned above is mean of 5 readings.
2) Above calibration is carried out as per customer's requirement.

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PANKAJ AMBEKAR PANKAJ
VASUDEO VASUDEO
Date: 2021.10.08
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Authorised Signatory





Instrument Sr. No. : 184-0004
Date of Calibration : 01/10/2021
ULR No. : CC228721100001538F

Page No. : 3 of 3
Certificate No. : CC/ECL/0927/21-22

Calibration Results :

CONTACT MODE

Calibration Standard		Device Under Calibration		Error		Expanded Uncertainty (±) in RPM
Range	Reading	Range	Reading	Units	% of Rdg.	
0.5 RPM to 20000 RPM	RPM	6.0 RPM to 15000.0 RPM	RPM	RPM		
	10.005		10.0	-0.005	-0.050	0.5
	50.016		50.0	-0.016	-0.032	0.5
	100.01		100.0	-0.01	-0.010	0.5
	499.98		499.9	-0.08	-0.016	0.5
	4999.9		4999.7	-0.2	-0.004	2
	7499.8		7499.5	-0.3	-0.004	2
	9999.9		9999.6	-0.3	-0.003	2
	12000		11999.6	-0.4	-0.003	3

Note : Value mentioned above is mean of 5 readings.

*** End of Calibration Certificate ***

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Date: 2021.10.08
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