

Calibration Certificate

UNIT DESCRIPTION: MODEL NO.:

SR. NO.: CERTIFICATE NO.:

NAME OF CUSTOMER:

ADDRESS OF CUSTOMER:

CALIBRATION DATE: CAL. VALIDITY:

DETAILS OF EQUIPMENT USED FOR CALIBRATION

NOTE: Tick mark where as applicable.

Digital Lab Thermometer	<input type="checkbox"/>	LCD Tachometer	<input type="checkbox"/>	Digital Stop Watch	<input type="checkbox"/>
Auto Ranging R.P.M. Meter	<input type="checkbox"/>	Digital Strobe	<input checked="" type="checkbox"/>	Weight Set	<input type="checkbox"/>
Digital Temperature Indicator	<input type="checkbox"/>				

Sr. No.	Description	Certified By	Instrument Id. No.	Certificate No.	Calibration Date	Validity
01	Digi. Strobe	Autocal	MSM 01	C20121291/P/01	22.12.2020	21.12.2021

OBSERVATIONS:

Sr. No.	Instrument Speed Displayed (RPM)	Speed Reading on Strobe Meter (RPM)	Diff. In Actual and Strobe Meter RPM	Remarks
01	4500	4540	40	OK
02	3000	3020	20	OK
03	1000	1005	05	OK

- NOTE:**
1. Calibration Traceable to national standards.
 2. Overall deviation is within specified accuracy.
 3. Result is related only to the item calibrated.
 4. Maximum tolerance permissible is $\pm 1^\circ\text{C}$ & $\pm 5^\circ\text{C}$ whichever is applicable and RPM $\pm 2\%$ FSD and $\pm 5\text{gm}$ to set weight.

REMARKS: ACCEPTED



CALIBRATED BY: VIJAY KADAM

APPROVED BY: Manager Q. A.

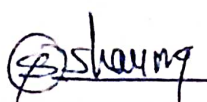



AUTOCAL SOLUTIONS PVT. LTD.
 Regd. Office & Laboratory: Unit No. 4, Ruby Industrial Estate PCS Ltd.,
 Navghar, Vasai Road (E), Dist. Palghar - 401 210, Maharashtra, India.
 CIN No U72200MH2008PTC178116
 Email Id: sales@autocal.net Web Address: www.autocal.net
 Phone No.: (0250) 2393460

CALIBRATION CERTIFICATE

MECHANICAL DISCIPLINE

FF01-E Rev 00
Page 1 of 1

Certificate No. C20121291/P/01		Issue Date 05/01/2021	
Date of Calibration 22/12/2020		Next Recommended Calibration Date 21/12/2021	
Service Request Form No. C20121291			
Calibrated for		REMI ELEKTROTECHNIK LTD. (Instruments division) Building 'B', Survey No. 65/1, Naikpada, Waliv, Vasai (E) Palghar Maharashtra 401208 India	
Date of Receipt of Instrument 19/12/2020			
Condition of Instrument on Receipt Working		Calibrated at Lab	
Environmental Conditions		Temperature: 23 ± 1.5°C	Relative Humidity 50 ± 10 % RH
Details of Unit Under Calibration (UUC)			
Instrument	Stroboscope	Equipment:	NA
Make	Test Technics	Equipment ID.	NA
Model	TT - 5100	Department	QC
Sr. No.	1551	Section	NA
Tag/ID No.	MSM-01	Location	NA
Procedure No.	WI/ASPL/CAL/PR/07		
150 to 20000 RPM		Resolution/Least Count 1 RPM	Accuracy/Acceptance Criteria Not Specified
Details of Standard(s) Used for Calibration (Traceable to National / International Standards)			
Description	Make / Model	Serial No./ ID No.	Traceability (Certificate No.)
Digital Tachometer	Monarch / PLT200	1856742 STD/P/PR/07	Hi Tech Calibration Services, Chennai (HT/CC/200610-10/001)
			Valid upto 17/06/2021
Measurement Result			
Group: Acceleration, Speed & Acoustics			
Unit of Measurement : RPM			
No.	Reading On UUC	Reading On Standard	Error
1	150	150.02	-0.02
2	500	500.08	-0.08
3	1000	1000.6	-0.6
4	7000	7002.3	-2.3
5	20000	20003	-3
			(±) Expanded Uncertainty
			0.89
			0.89
			0.90
			2.62
			3.93
Remarks			
1 The reported expanded uncertainty of measurement is stated as a standard uncertainty of measurement multiplied by coverage factor "k = 2" such that the coverage probability corresponds to approximately 95% confidence level			
2 The Measured Values Mentioned are the average of 5 readings			
3 Measured readings have been mentioned.			
Notes			
1 This certificate refers only to the particular item calibrated at site / laboratory.			
2 The calibration results reported are valid at the time of and under the stated conditions of measurement.			
3 Any correction in this certificate invalidates this certificate			
4 This certificate shall not be reproduced except, in full without the written approval from the Laboratory			
5 Calibration of UUC done by any accredited laboratory is meant for scientific and industrial purpose only however, if used for commercial trading additional recognition /approval shall be compiled as a required by department of legal metrology regulatory bodies etc.			
 Calibrated By Somesh Sharma Calibration Engineer		 Authorised Signatory Jyotindra Mehta Senior Manager	
***** End of Certificate *****			



CALIBRATION CERTIFICATE

Certificate No.	HT/CC/200610-10/001	U/LR No.	U/LR - CC21512D000012916F
CUSTOMER DETAILS		DEVICE UNDER CALIBRATION DETAILS	
Name	M/s. Autocal Solutions Pvt. Ltd., Unit - 4, Ruby Industrial Estate PCS Ltd. Nayghat, Vasar (East), Palaghat, Maharashtra - 401 210	Description	Digital Tachometer
Address		Make	Monarch Model PLT 200
Job No.	200610-10	Mode	Non - Contact
Job Date	10-Jun-2020	Range	5 to 200000 RPM
Issue Date	18-Jun-2020	Least Count	0.001 / 0.01 / 0.1 / 1 RPM
Received Condition of DUC	Satisfactory	Accuracy	± 0.01 % Rdg + 1 Digit
ENVIRONMENTAL CONDITION		Serial No.	1R56742
Temperature	25 °C ± 2 °C	Identification	STD/P/PR/07
Humidity	30 % RH to 75 % RH	Calibration On	18-Jun-2020
Discipline & Group	Mechanical Calibration & Acceleration, Speed and Acoustics		
Calibration Procedure	HT / WI / M / AS (Section 01) & SANAS IR 15-02 by Comparison Method		
		STANDARD DETAILS	
Description	Digital Tachometer		
Identification No.	M/AS/TACHU/05		
Certificate No.	HT/2739/001		
Valid Till	15-Sept-2020		

CALIBRATION RESULT

Mode : Non - Contact

DUC Reading in RPM	Standard Reading in RPM	Error in RPM	Expanded Uncertainty in ± RPM
10.001	10.0	0.001	0.30
60.005	60.0	0.005	0.38
100.01	100.0	0.01	0.30
1000.4	1000.6	-0.2	0.68
10001	10001.3	0.3	2.42
30003	30004.7	0.7	3.13
50004	50003.5	-0.5	3.89
89997	89995.7	1.3	4.16

Remarks:

- The Calibration is performed at Permanent Facility.
- The Calibration Certificate is valid for scientific & industrial purpose only.
- The Expanded uncertainty is expressed at 95.45 % confidence level with coverage factor k=2.

Checked By

D. AYASOMAR, CALIBRATION ENGINEER

HT / P1 / TB / 01

CERTIFIED TRUE COPY
AUTOCAL SOLUTIONS PVT. LTD.

End of Certificate

Approved By
R. B. Harish
R. B. HARISHAM, PTD / PINGAL MANAGER

Page 1 of 1

Authorized Signatory