



TMSCC

TESTING MACHINE SERVICE AND CALIBRATION CENTRE
Precision is Our Destination.....

An ISO 9001 : 2015 Certified company
Calibration of Various Instruments & Testing Machines...



CC - 3125

Form No.: TMSCC/R/23

CALIBRATION CERTIFICATE

CALIBRATION CERTIFICATE NO.: 2023/07/268 Page 1 of 2

ISSUE DATE : 13-Jul-2023

ULR No.: CC312523000009534F

1.0 ISSUED TO : M/s.: South Calcutta Diagnostic Center
570, Tentulberia Road, P.O.: Garla,
P.S.: Sonarpur, Kolkata - 700084

1.1 Service Request From No. : SRF/2023/07/03/03

1.2 Service Request Date : 3-Jul-2023

1.3 Location : At Lab

1.4 Description identification of item to be calibrated :

i Name :	RPM & Timer of Centrifuge	ii Make :	Electra
iii Model / Type No.:	BL-12	iv S/L No.:	201803513-18
v I.D.No.:	-	vi Job Code No.:	2023/07/268
vii Capacity	4000 Rpm & 99 Min	viii Resolution :	10 Rpm & 1 min
ix Accuracy :	As Per ASTM F-2046, NIST: 1960-12	x End User :	-

1.5 Full / Partial Calibration : Full Calibration

1.6 Applicable specification of item to be calibrated: Accuracy / permissible limit : Not Specified.

1.7 Date of receipt of item : 3-Jul-2023 **1.7** Date of calibration : 3-Jul-2023

1.9 Calibration due on : 2-Jul-2024 **1.9** Frequency of calibration once in : 12 Months

2.1 Environmental condition during calibration :
Temperature : 25.2 °C
Humidity : 53% RH

2.2 Basis of calibration : SOP/05/01, SOP/9/16

2.3 Traceability : Standards used for calibration are traceable to National Standards through NABL accredited Laboratory.

Name of Instrument	Sl. No./ Id No.	Certificate No.	Lab Certificate No.	Calibrated On	Due On
Digital Tachometer	(TMSCC/DT/01) (Sl. No. - 197-0010V)	NI2023/04/0019	CC-2294	07-04-2023	06-04-2024
Digital Time Totaliser	(TMSCC/TT/01) (Sl. No. - 19HT0559)	TSC/22-23/12095-38	CC-2231	15-11-2022	15-11-2023

CALIBRATION RESULTS

1. RPM Range: Maximum 4000 rpm, L/c : 10 rpm

Sl. No.	Denomination set in rpm	Observed Reading at Ref. Std. In rpm (Average of five readings)	Error in rpm	Uncertainty in (±) %	Acceptance Criteria
1	100	99.6	-0.4	0.53	Pass
2	400	398.3	-1.7	0.53	Pass
3	1000	995.7	-4.3	0.53	Pass
4	3000	2987.1	-12.9	0.53	Pass
5	4000	3982.8	-17.2	0.53	Pass

Maximum Permissible Error : (±) 1% of rdg

Calibrated By :

P. Dasmalakar
(Sr. Calibration Engineer)

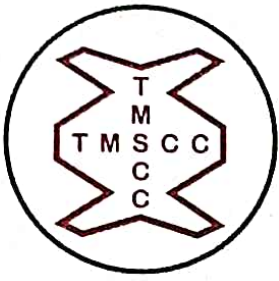
Checked By :

C. Ghosh
(Technical Director)



Approved By :

S. Chowdhury
(Quality Manager)



TMSCC

TESTING MACHINE SERVICE AND CALIBRATION CENTRE
Precision is Our Destination.....

An ISO 9001 : 2015 Certified company
Calibration of Various Instruments & Testing Machines...



CC - 3125

Form No.: TMSCC/R/23		CC No.:	2023/07/268		
		Date :	13-Jul-2023		
		Page No.: 2 of 2			
2. Time Maximum Range : 99 min L/c: 1 min					
Sl. No.	Reading at Standard Totaliser in sec.	Reading at DUC in Min (Avg. of five readings)	Error in sec	Uncertainty in \pm sec	Acceptance Criteria
1	300.14	5	-0.14	1.86	Pass
2	1800.44	30	-0.44	1.86	Pass
3	3601.18	60	-1.18	1.86	Pass
Maximum Permissible Error : ± 5 sec (upto 1 min) / ± 6 sec (above 1 min)					
Measurement Uncertainty at 95% Confidence Level where Coverage Factor k = 2					
REMARKS : The DUC has been calibrated over its range. The readings observed are tabulated above. The reference standard is traceable to National standard.					
DUC: Device Under Calibration.					
Physical Status of the DUC : OK					

Calibrated By :

J. Bhattacharjee
(Sr. Calibration Engineer)

Checked By :

C. Ghosh
(Technical Director)

Approved By :

P. K. Modak
(Sr. Calibration Engineer)

END OF CERTIFICATE

