

Calibration Certificate

Certificate No.: YEA(C)/ 230726S/C875/005

Dated : 31.07.2023

ULR No.: CC222123000009965F

Calibrated for : **Central Pollution Control Board**

Southend Conclave 1582, Rajdanga Main Road,
Kolkata - 700107, West Bengal, India.

Calibrated on.	Next Calibration Due On.	Page No.	No. of Pages
26.07.2023	26.07.2024	1	3

Description of Instrument

Name : Auto Clave
Identification : CPCB/KOL/SSAUTO-03/10
Range : 121 °C & 0 to 30 psi
Least Count : 0.5 °C & 1 psi
Make : Bhatta Charyya & Co.

Service Request No. / Order Reference : 230726S/C875/001-005

Receipt of Instrument : 26.07.2023

Location where calibration performed : At site

Applicable Specification of Instrument to be Calibrated : Not Specified

Condition of Instrument to be Calibrated : Satisfactory

Basis of Calibration : Comparison method with reference to YEA/WI/T-04

Environmental Condition during Calibration : *Temp.* : 22±2°C *RH* : 50±10%

Equipment used for Calibration : Standard Data Acquisition System & Standard RTD Sensors(9 Nos.)
 & Standard Digital Pressure Gauge & Pressure Comparator

Traceability

: To National Standard vide Certificate No.
 YEA(C)/ 221221/Y001/001 valid till 20.12.2023
 TL/023/52.1.1 valid till 11.01.2024
 TL/023/52.1.2 valid till 11.01.2024
 TL/023/52.1.3 valid till 11.01.2024
 TL/023/52.1.4 valid till 11.01.2024
 TL/023/52.1.5 valid till 11.01.2024
 TL/023/52.1.6 valid till 11.01.2024
 TL/023/52.1.7 valid till 11.01.2024
 TL/023/52.1.8 valid till 11.01.2024
 TL/023/52.1.9 valid till 11.01.2024
 YEA (C)/221118/Y001/001 valid till 17.11.2023

Measurement Uncertainty

: The figures are stated in the result at coverage factor
 $k= 2$ corresponding to confidence probability of
 95% for normal distribution.

Laboratory Identification

: Sticker is affixed for authentication of calibration.

The above Instrument/Equipment/Machine has been calibrated &
 The results are given in the page 2 to 3 ...of the Certificate.

Cont...2



CC-2221



YEA

☎ : 033 2677 1411/1412, 2667 1909

YOUNG ENGG. & CALIBRATION SERVICES PVT. LTD.

Admn. Office & Lab : Kamardanga Road (Opp. Tarama Ashram), Ichapur, Howrah - 711 104

E-mail : calibration@yeagroup.org ★ Visit us at : www.yeagroup.org

CIN : U74140WB2005PTC106389 ★ Toll Free Help Desk : 1 800 345 9001

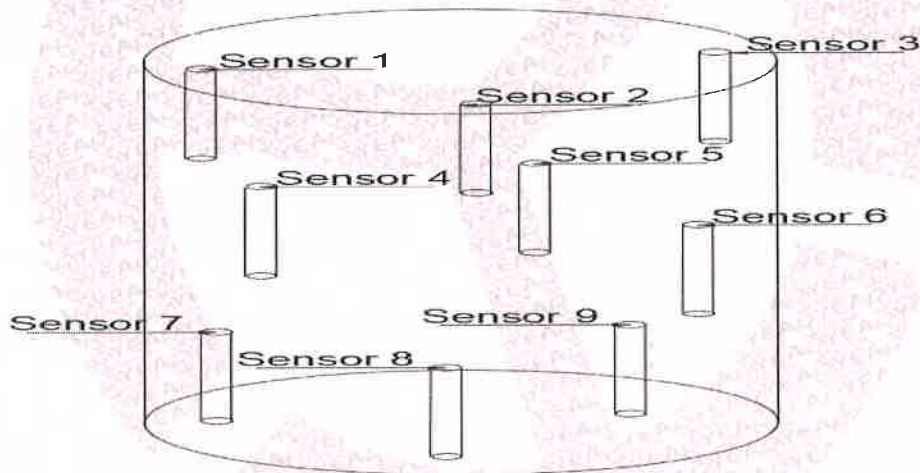
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Calibration Results

Thermal Calibration Calibration Results of Auto Clave (Temp.)

Set Value (°C)	Zone	DUC Value			Standard Value		
		(° C)			(° C)		
		Maximum	Minimum	Average	Maximum	Minimum	Average
121	1	121	120	121	120.559	120.063	120.318
	2				120.727	120.002	120.415
	3				120.578	120.255	120.440
	4				120.869	120.057	120.400
	5				120.860	120.152	120.410
	6				120.779	120.078	120.444
	7				121.050	120.084	120.395
	8				120.142	119.979	120.090
	9				120.778	120.618	120.712
Stability of Auto Clave : 0.483 °C							
Nonuniformity of Auto Clave : 0.623 °C							
Measurement Uncertainty (±) : 2.68 °C							



Temperature Scale : ITS - 90

Cont.





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Calibration Results

Mechanical Calibration

Calibration Results of Auto Clave (Pressure)

Sl. No.	DUC Value	Standard Value (bar)		Average Standard Value	Corresponding Std Value	Deviation	Error of reading	Measurement Uncertainty
	(psi)	(up)	(down)	(bar)	(psi)	(psi)	%	(± % of Rdg.)
1	0.0	0.0000	0.0010	0.0005	0.0073	-0.0070
2	5.0	0.3442	0.3442	0.3442	4.9922	0.0080	0.1600	2.343
3	10.0	0.6881	0.6881	0.6881	9.9800	0.0200	0.2000	1.185
4	15.0	1.0324	1.0324	1.0324	14.9737	0.0260	0.1733	0.804
5	20.0	1.3762	1.3762	1.3762	19.9601	0.0400	0.2000	0.603
6	25.0	1.7205	1.7205	1.7205	24.9537	0.0460	0.1840	0.494
7	29.0	1.9961	1.9961	1.9961	28.9510	0.0490	0.1690	0.426

DUC : Device Under Calibration

REMARKS : The above Auto Clave has been calibrated and the readings are tabulated above.

NOTES : This certificate refers to the results tabulated at the time of calibration only for the above mentioned item submitted for calibration and this should not be reproduced, other than in full except with prior written approval from the head of calibration laboratory.

Authorised By


A. Das

Manager Calibration

*** End of the Calibration Certificate ***

