

Doc. No: ADC/BME/SOP/CAL/01		INTERNAL CALIBRATION OF CENTRIFUGE		
Issue No: 01	Issue Date: 01. 02. 2022	Prepared by: Biomedical Engineer	Copy No: 1	Page No: 1 of 2
Amend No: 00	Amend Date:	Approved by: Biomedical HOD	Issued by: Biomedical Dept	

1	Purpose	For the Calibration of Centrifuge
2	Primary sample	
	(A) Type	Centrifuge
	(B) Quantity	1
	(C) Unit	Rpm
	(D) Handling & transport of samples	Site calibration No damage
3	Safety precautions	
	(A) Obligatory	NA
	(B) Handling 'high- risk' sample	Do not touch the infra red sensor, or rotor of Centrifuge while operation
4	Methodology	
5	Principle	The Instrument Error is measured for RPM measurement in UUC is determined by using Precision Digital tachometer calibrated by NABL accredited laboratory
6	Responsibility (A) Calibration & QC check	Biomedical Engineer Chief Clinical Engineer
7	Equipment & Apparatus	Tachometer Calibrated by NABL accredited laboratory
8	Calibration procedures for Standard	a. Switch on the Centrifuge b. Check room temperature & humidity with Hygrometer calibrated by NABL Accredited Laboratory c. Place a Tachometer Calibrated by NABL accredited laboratory & target infra red sensor to the Rotor of Centrifuge & adjust the Knob so as to achieve Desired rpm d. Settle the Knob when desired rpm is displayed in the Standard Centrifuge e. Measure the rpm of Sample Centrifuge to be calibrated f. Observe the result & record in the assessment Result sheet k. Calculate the error in result compared with calibration sheet l. Adjust the Knob to next rpm until of Standard Centrifuge display & settle to the next desired rpm m. Repeat the step from e. to k. for minimum 3 times ascending &

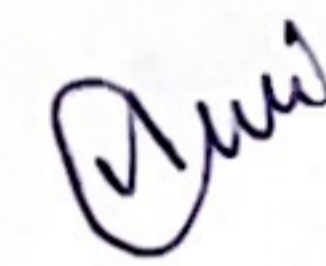
Doc. No: ADC/BME/SOP/CAL/01		INTERNAL CALIBRATION OF CENTRIFUGE		
Issue No: 01	Issue Date: 01. 02. 2022	Prepared by: Biomedical Engineer	Copy No: 1	Page No: 2 of 2
Amend No: 00	Amend Date:	Approved by: Biomedical HOD	Issued by: Biomedical Dept	

		Descending n. Report the % error compared with acceptable tolerance o. If % error is less than Acceptable tolerance then Calibration is accepted & new calibration Certificate & new status of calibration is issued after dew verification by Biomedical HOD
9	Quality Control Protocol (A) Control Name (B) Control procedures	Centrifuge Calibrated by NABL accredited calibrated Tachometer See the Ref.Doc no. ADC/BME/SOP/CAL/01 Topic 8
10	Procedure	
	(A) Method	See the Ref.Doc no. ADC/BME/SOP/CAL/01 Topic 8
	(B) Calculation / Graph	NA
	(C) Forms / Records	By Electronically / Hard Copy
11	Interference/ cross reaction/Specificity	No significant interference. In very rare cases improper adjustment, unstable reading, Magnetic effect, wind effect, may cause unreliable results.
12	Performance Specificity:	
	(A) Measuring Range	0.65 to 4000 rpm
	(B) Linearity	NA
	(C) Sensitivity/ limit of detection	+ - 0.05%
13	Reference Range	10 - 10000

Prepared By



Nikunj Ghodasara
Bio-Medical Engineer
Inhouse



Dr. Anil Sawalir