

Beaumont

Origination 6/25/2021
Last 5/2/2023
Approved
Effective 5/2/2023
Last Revised 5/2/2023
Next Review 5/1/2025

Document Teresa Lovins:
Contact Supv, Laboratory
Area Laboratory-Blood
Bank
Applicability Troy

Centrifuge RPM Check - Troy

Document Type: Procedure

I. PURPOSE AND OBJECTIVE:

This procedure is to be used by the Blood Bank staff to verify the acceptable speed (RPM) of the centrifuge equipment used in the department. The speed of the centrifuge is checked for accuracy every six months, after repair or after adjustment of the centrifuge.

II. DEFINITIONS:

- A. The following terms, as they are used throughout this document, are defined below:
- B. **Rotor Head:** top of the rotating part of an electrical or mechanical device
- C. **Tachometer:** an instrument for determining speed, especially the rotational speed of a shaft
- D. **RPM:** revolutions per minute

III. SUPPLIES AND EQUIPMENT:

- A. Calibrated traceable tachometer
- B. Reflective tape

IV. PROCEDURE:

- A. If not already installed in the centrifuge, create a reflective mark by cutting a strip of reflective tape into approximate 0.5 inch square. Apply the reflective mark to the rotor head.
- B. Start the centrifuge

- C. Power on the tachometer by pressing Hold/Power button
- D. Release the Hold/Power button and align the visible LED beam with the reflective mark.
- E. Read and record the RPM value

V. EXPECTED RESULTS:

Centrifuge	Acceptable RPMs
Blood Bank Sero-Fuge	3100 - 3500 rpm
Sorvall Cell Washer CW2	3500 - 3600 rpm
Thermo-scientific CW3	1200 ± 12 rpm
Horizon Centrifuge	3380 ± 100 rpm
MTS Gel Workstation	1032 ± 10 rpm

VI. INTERPRETATION:

The centrifuge RPMs must be within the acceptable range as listed previously. If the RPMs are not within the acceptable range, the equipment may not be used for any Blood Bank samples, reagents, controls or other materials. The following steps must be completed before the equipment can be placed in use:

- A. Attach a green sheet, *Out of Order and/or Service Called*, to the instrument.
- B. Detail the document, *Blood Bank Equipment and Reagent Problem Log*, with details of the event
- C. Notify the supervisor or Lead MT.

VII. REFERENCES:

AABB, *Technical Manual*, current edition

AABB, *Standards for Blood Bank and Transfusion Medicine Services*, current edition.

Fisherbrand Traceable® Tachometer with Red LED Pointer, Instruction Manual, current edition

Attachments

[Blood Bank Centrifuge Function Checks.pdf](#)

[Out of Order.pdf](#)

[Reagent Equipment Problems Log.pdf](#)

Approval Signatures

Step Description	Approver	Date
Policy and Forms Steering Committee (if needed)	Vaishali Pansare: Chief, Pathology	5/2/2023
	Ryan Johnson: OUWB Clinical Faculty	5/2/2023
	Gail Juleff: Project Mgr Policy	5/2/2023
	Teresa Lovins: Supv, Laboratory	5/2/2023
	Teresa Lovins: Supv, Laboratory	5/2/2023

COPY