



REVISED NATIONAL TB CONTROL PROGRAMME

Standard Operating Procedures for Maintenance & Servicing of Refrigerated Centrifuge

CENTRAL TB DIVISION

MINISTRY OF HEALTH & FAMILY WELFARE, GOI

1. INTRODUCTION

A refrigerated centrifuge is intended to separate particles in a liquid by sedimentation. In TB laboratory, refrigerated centrifuges are used for the sedimentation of tubercle bacilli and their concentration within liquefied sputa or body fluids.

2. SCOPE

This operating procedure describes the use and maintenance of refrigerated centrifuge.

3. SERVICING & MAINTENANCE

(i) Daily Maintenance

- (a) Wipe the inside surface of the centrifuge with disinfectant solution, rinse thoroughly and dry. For the centrifuge which is turned off at night, open the top to allow the bowl to dry. During the day when the unit is under refrigeration, leave the top closed to avoid condensation and ice buildup.
- (b) The centrifuge must not be used if the interior is hot, if unusual vibrations or noises occur, or if deterioration (corrosion of parts) is detected. A qualified service technician should be contacted.
- (c) Most vibrations are due to improper balancing and can be corrected by re-balancing the buckets and tubes.

(ii) Monthly maintenance

- (a) Clean the centrifuge housing, rotor chamber, rotors and rotor accessories with a neutral cleaning agent.
- (b) Clean plastic and non-metal parts with a fresh solution of 5% phenol followed by distilled water/alcohol.

(iii) Annual Maintenance

Service is to be performed by a qualified technician. The service technician must ensure that the unit operates safely and properly. This would include cleaning condenser coils, fans, screens, filters and checking the centrifuge brushes, bearings, timer, temperature, speed and for electrical integrity.

(iv) Servicing

In addition to Annual maintenance, scheduled preventive maintenance visits are to be undertaken by the agency providing the AMC.

The following should be undertaken during Annual Maintenance:

- (a) Overall inspection of centrifuge, which includes physical check, check of any damage to the rotor.
- (b) Remove rotor and grease the shaft, hinges and other moving mechanical parts.
- (c) Clean the bowl and buckets.
- (d) Check for electric connections, supply input and earthing.
- (e) Check the compressor current and voltage.
- (f) Select a program and run the centrifuge at the Labs standard use RPM/G, Temperature and Time and calibrate using a Tachometer to certify the performance in accordance to NABL standards.

4. References: User manual of Refrigerated Centrifuge