सीएसआईआर-केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान
CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE
मैसूरु / MYSURU-570 020, भारत / INDIA
(Constituent Laboratory of CSIR, New Delhi (Ministry of Science & Technology)
An ISO 9001:2008, ISO 14001:2004 & ISO 17025:2005, NABL Accredited Laboratory

Corrigendum: Tender for Ultra Centrifuge

Corrigendum Title: Revised Technical Specification based on PBC

Tender Ref: CFTRI/74253/24-25 Date: 28-10- 2024

Tender ID: 2024_CSIR_212797_1

The revised final specification based on the discussion in Pre Bid Conference held on 05-11-2024 @ 11.00A.M is uploaded herewith.

All the prospective bidders are requested to take cognizance of the revised specification and submit their bids accordingly on or before 03.00 p.m. on 27/November/2024.

All other tender terms and conditions of tender remain unaltered.

-Sd-

Controller of Stores &Purchase
CSIR-CFTRI, Mysore
Dt. 14-11-2024

Revised Technical Specification based on PBC

Ultra Centrifuge

CSIR-CFTRI Specification for Ultracentrifuge

1. The Ultracentrifuge should run at speed of ≥ 1,00,000 rpm
2. The Ultracentrifuge should run at RCF of ≥ 8,00,000 x g
3. The Ultracentrifuge should have a Speed Control Accuracy of ± 2 rpm of set speed or better
4. The Ultracentrifuge should have total capacity of 1.5 litres or better
5. The Ultracentrifuge should have the temperature set range from 0 °C to 40 °C with 1 °C increments and temperature control/accuracy of ± 0.5 °C or better
6. The Ultracentrifuge should have a Drive System for imbalance tolerance.
7. The Ultracentrifuge should have sensor to detect any imbalance in the system to activate the imbalance alarm and stops rotation immediately when detected
8. The Ultracentrifuge should have features like delayed start/ stop, Colour LCD touch screen, RPM/ RCF mode, Run Scheduling and USB data communications
9. The Ultracentrifuges should support automatic rotor locking by self-locking rotors system, without any need for a tool or push the button to lock/unlock the rotors.
10. The Ultracentrifuge should have a Real Time Control function makes timer setting easier than conventional delay time setting (set date and time when you want to start or finish the centrifugation, as calendar and clock are equipped with the system)
11. The Ultracentrifuge should have an option for remote monitoring application through mobile app in Wi-Fi/LAN network
12. The Ultracentrifuge should have a Thermo-module cooling system
13. The Ultracentrifuge should have Vacuum System: Oil-rotary vacuum pump with moisture removal function and oil diffusion pump
14. The Ultracentrifuge should have provision to assemble micro filters in the vacuum pump line for Biosafety to prevent any bio-hazardous sample into a room
15. The Ultracentrifuge should have Acceleration/ Deceleration Profile: 10/10 or better
16. The Ultracentrifuge should be able to operate with Fixed Angle Rotor, Vertical Rotor, and Swinging Bucket Rotor.
17. The Ultracentrifuge should have option to browse available rotors, their specifications and accessories
18. The Ultracentrifuge should support remote monitoring and centrifugation simulations using dedicated software's
19. The Ultracentrifuge should operate on 220-240 VAC, 50 Hz, power supply.
20. The Ultracentrifuge should have noise level of ≤ 60 dB(A)
21. The ultracentrifuge must meet all product safety and standards certifications according to international or national standards
22. The whole Ultracentrifuge should carry minimum one-year standard warranty from the date of satisfactory installation and ten years for the drive units.
23. Should have minimum Ten installations of ultracentrifuges in Government/premier Research Institutions in India
24. Should have well-trained application and service engineers based in Mysore/Bangalore.
25. Please quote for post warranty AMC (Labour only) charges for 5 years

Fixed angle Titanium Rotor

1. Max rotor capacity: ≥ 1.5 ml to 2 ml with minimum 24 tubes. Max. Rotor Speed: 50,000 to 100,000 rpm; Max. Rotor g-Force: 2,50,000 to 8,00,000 x g; K Factor: 5 to 35; Should include 2000 nos. of polypropylene tubes of nominal volume along with its required accessories.

2. Max. Rotor Capacity: ≥ 39 ml x 8 tubes; Max. Rotor Speed: 70,000 rpm; Max. Rotor g-Force: 4,90, 000 to 5,10,000 x g; K Factor: 30 to 50; Should include 100 nos. of polypropylene tubes of nominal volume along with all its required accessories.

3. Max. Rotor Capacity: ≥ 12 mL x 8 tubes; Max. Rotor Speed: 90,000 rpm; Max. Rotor g-Force: 6,80,000 to 7,00,000 x g; K Factor: 20 to 30; Should include 100 nos. of polypropylene tubes of nominal volume along with all its required accessories.

Swinging Bucket Titanium Rotor

1. Max. Rotor Capacity: ≥ 13 mL x 6 tubes; Max. Rotor Speed: 40,000 rpm; Max. Rotor g-Force: 2,80,000 to 3,00,000 x g; K Factor: 130 to 150; Should include 100 nos. of Polypropylene tubes of nominal volume along with all its required accessories.

2. Max. Rotor Capacity: ≥ 38 mL x 6 tubes; Max. Rotor Speed: 32,000 rpm; Max. Rotor g-Force: 1,70,000 to 1,80,000 x g; K Factor: 190 to 210; Should include 100 nos. of 40 mL Polypropylene tubes of nominal volume along with all its required accessories.

All the rotors should be provided with all necessary adapters, caps, tools required to use.
Tube sealer to seal the tubes and the necessary accessories should also be included.