

## **KCCP LIMITED**

(A Govt. of Kerala Undertaking)

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**Ref: KCCP/TENDER/2553/2022-23**

**Date: 13.02.2023**

### **TENDER NOTICE**

Sealed tenders are invited from interested parties for supply and installation of lab equipments (Hot air oven (Digital) - 1No, Vertical Autoclave (50 Ltr Capacity) - 1 No, BOD incubator - 1 No, Biological safety Cabinet Class II - 1 No and Colony counter - 1 No) required for setting up microbiological laboratory at Integrated Coconut and Fruit processing unit, Kannapuram, Kannur District.

Cost of tender form : Rs.1,770/- (Including GST)

EMD : Rs.5,000/-

Priced tender form may be obtained from our office up to 04.03.2023, 5.00 PM. Tender will be accepted up to 06.03.2023, 2.00 PM and will be opened on the same day at 4.00 PM. Details if any can be had from our Administrative Office, Pappinisseri.

For details please visit [www.kccpl.in](http://www.kccpl.in)

Sd/  
**MANAGING DIRECTOR**

## SPECIFICATIONS

SL. NO	NAME OF EQUIPMENT	SPECIFICATION
1.	Hot air oven (Digital)	<ul style="list-style-type: none"> <li>• Thermostatic controlled with uniform Temperature through the chamber.</li> <li>• Mechanical convectional type air circulation</li> <li>• Tripled Walled Construction</li> <li>• Min. 75mm insulation with high grade glass\ mineral wool minimize the heat loss.</li> <li>• Temperature range 50 to 250 Deg.C,</li> <li>• Temperature accuracy +_ 1 Deg.C. throughout chamber</li> <li>• Temperature Uniformity +_ 1 Deg.C.</li> <li>• Temperature control by Digital Controller cum indicator</li> <li>• Program facility for temperature and time.</li> <li>• Capillary Thermostat of for safety set.</li> <li>• High Temperature cut off</li> <li>• Door with Tight Fitting Asbestos/Silicon Beading</li> <li>• Outer Rust proof powder coating.</li> <li>• Adjustable shelves loading rack</li> <li>• Long lasting Kanthal wire Finned Heater with capacity: 2000 watts.</li> <li>• Adjustable Air went on top</li> <li>• Tabletop Model</li> <li>• Perforated Stainless Steel trays - 3 Nos.</li> <li>• Operation on 230V AC Mains with MCB ON\OFF Main Switch.</li> <li>• <b>Chamber Size: 18 x 18 x 24 inches</b></li> <li>• makes you adjust each space of shelves without difficulty.</li> <li>• forced air circulation at triple walled back by durable coaxial blower, maintains optimum temperature uniformity and homogeneity.</li> <li>• High grade PUF INSULATION between outer and inner chamber for minimal thermal losses.</li> <li>• Caster wheel mounted for easy portability with locking facility.</li> <li>• Front double walled door is provided with lock and key arrangement</li> <li>• Door operated illumination lamp is fitted inside the chamber for easy visibility.</li> <li>• Finned tube evaporator facilitates uniform and fastest cooling effect.</li> <li>• Temperature range 5-50 Deg.C with resolution of 0.1 Deg C accuracy +0.5 Deg C.</li> <li>• Temperature controlling by microprocessor based advanced LCD controller Auto Tuning facility, Single Point Ram Soak, Heat and Cool PID, Soft Start, Auto and Manual mode.</li> </ul>

		<ul style="list-style-type: none"> <li>• Over temperature limit switch prevents overheating. Safety cut- off for compressor alone, to switch off the compressor in case overheating.</li> <li>• Automatic Voltage stabilizer as compulsory accessory.</li> <li>• Should have safety certificate from a competent authority CE and ISO 13484: 2012, ISO 9001: 2015/ ISO 45001: 2018 CERTIFIED.</li> </ul>
2	Vertical Autoclave	<ul style="list-style-type: none"> <li>• Semi-Automatic, Digital temperature controller cum indicator with Stainless Steel wing nut locking.</li> <li>• Double Walled Construction with inner and outer surface SS 304. All these sheets Are Argon welded &amp; outer chamber made of high-quality SS 304 Sheet.</li> <li>• Electrically heated by ISI quality immersion type heater with working pressure of 15 psi.</li> <li>• Hydraulically dye pressed Lid from SS plate with easy pedal lifting device.</li> <li>• Having pressure gauge, double safety valve, quick release coupling valve and handle.</li> <li>• With Water Level Indicator, Low</li> <li>• Water Level cutoff and in-built Digital Timer With temperature and pressure cut off system</li> <li>• Supplier must provide calibration certificates.</li> <li>• Capacity: 50 ltrs</li> </ul>
3	BOD incubator	<ul style="list-style-type: none"> <li>• Temperature Range -5-60°C</li> <li>• Should have electric refrigeration with Peltier module</li> <li>• Should Have Adjustable Fan Speed</li> <li>• Temperature variation should be <math>\pm 0.3</math></li> <li>• Temperature fluctuations should be 0.1</li> <li>• With a solid double walled door, full view inner toughened glass door enables inspection and monitoring of inner chamber specimens without disturbing the process temperature.</li> <li>• Excellent quality magnetic gum packing door gasket for external door.</li> <li>• user oriented design of shelves</li> <li>• CE/ ISO certified.</li> <li>• Should have safety certificate from a competent authority CE and ISO.</li> <li>• ISO 9001-2015, ISO- 13485-2012.</li> </ul>
4.	Biological safety cabinet	<ul style="list-style-type: none"> <li>• <b>Size: 4 feet x 2 feet x 2 feet</b></li> <li>• INTERIOR WORK AREA TO BE FROM A SINGLE Piece of IS 304 grade stainless steel with large radius (joint free corners) to simplify cleaning</li> <li>• The cabinet work area must have No welded joints which collect contaminants or rust.</li> </ul>

		<ul style="list-style-type: none"> <li>• Cleanliness level as per CLASS 100 (ISO 5 for particle sizes 0.5 micron &lt; 3530 particles/m<sup>3</sup> of air at both rest and operation.</li> <li>• Operation condition as per ISO 14644 (ISO 5 replaces CLASS 100 US – FS 209 E) conforming to NSF / ANSI, USA and En 12469 Standards.</li> <li>• Work table should have removable type table top, made of perforated IS 304 stainless steels with satin finish</li> <li>• Direction of flow vertical.</li> <li>• UV germicidal lamp: emission of 254 nm</li> <li>• Alarm must be installed to indicate loss of exhaust flow. Should have audible alarm to warn the operator if the window is raised above recommend height.</li> </ul> <p><b>Certifications required:</b></p> <ul style="list-style-type: none"> <li>• Test certificate for mini – pleat HEPA filters</li> <li>• Calibration Certificate for pressure gauge</li> <li>• Calibration Certificates for air velocity anemometer</li> <li>• Warranty Certificate</li> <li>• Power Supply should have 220 – 240 V, 50Hz and all components UL listed and CE marked electric supply requirement</li> <li>• BSC Standard compliance: Meet American (NSF / ANSI) or European Standard EN 12469 (Type tested) or both</li> </ul>
5	Colony counter	<p><b>Digital colony counter with magnifier and counting pen</b></p> <ul style="list-style-type: none"> <li>• Digital display up to 4 digits with confirmation by audible tone.</li> <li>• It should consist of Magnifying lens (greater than 2X magnification with digital marking pen).</li> <li>• Accepts petri dish upto size 120mm diameter with a centering adaptor for standard 90mm petri dish.</li> <li>• Glare free viewing low energy bright LED's.</li> <li>• A switchable black back ground viewing translucent and difficult to see colonies.</li> <li>• Zero reset button.</li> <li>• High accuracy Optimal contrast with Dark Field system.</li> <li>• Adjustable sensitivity of touch surface.</li> </ul>