



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 Coffee Processing Line**

**Corrigendum Title: Revised Technical Specification based on PBC**

**Tender Ref: A3/74223/2021 Date: 30-10- 2021**

**Tender ID: 2021\_CSIR\_93352\_1**

The revised final specification based on the discussion in Pre Bid Conference held on 09-11-2021 @ 11.00A.M. at Purchase Committee Room, CSIR-CFTRI Mysuru enabling equal opportunity to all OEMs has been incorporated and given below as revised specification to the original tender specification. All bidders are requested to take cognizance of the revised specification and submit their bids accordingly on or before 02.00 p.m. on 07/December/2021.

The Firms who has already submitted their offer may resubmit their offer as per our revised final technical specification.

**All other tender terms and conditions remain unaltered.**

**Revised Technical Specification based on PBC  
Coffee Processing Line**

S. No	Equipment	Capacity	Quantity
1.	<p><b>Coffee pulper</b></p> <p>Disc type pulper to obtain pulp from ripe coffee fruit using wet processing method. The gap between the surface of the bulb and the chop rail should be adjustable to allow any clearance that is required handle different variety and size of coffee fruit. The hopper to be fitted with a feed mechanism to ensure uniform feeding of the fruit to the disc surface. Complete with all accessories like motor, controllers, starters &amp; switches etc., for the smooth operation of the unit</p>	100 kg/h	01
2.	<p><b>Coffee huller</b></p> <p>Cross Beater type Coffee Millers for efficiently hulling both parchment and dry cherry coffee. Complete with hulling cylinder, perforated screen, cross beaters, aspirator system to separate husk and peels from the coffee beans, Oscillating screen with adjustable drive to separate hulled and unhulled coffee, discharging sections. Complete with motor, starters, switches and all other accessories for the smooth operation of the unit</p>	100 kg/h	01
3.	<p><b>Cabinet dryer</b></p> <p>Double walled, through flow drying chamber constructed out of MS frame and MS sheet of suitable thickness. Electrically heated chamber provided with glass wool insulation. Complete with electric motor, blower, heater, starter, digital temperature indicator and controller etc.</p> <ul style="list-style-type: none"> <li>▪ No of Trays: 96 (2 mm perforation)</li> <li>▪ Material: AISI304</li> <li>▪ Tray size: Standard (approx) - 800 x 400 x 32 mm</li> <li>▪ Temperature range: up to 150 °C</li> <li>▪ Accuracy <math>\pm 1^{\circ}\text{C}</math></li> <li>▪ Initial Moisture (wb): 60-65%</li> <li>▪ Final Moisture (wb): 6-8%</li> <li>▪ Mode of heating: Electrical</li> <li>▪ Fan for air circulation and uniform temperature distribution inside the dryer.</li> <li>▪ Double walled chamber: Inner made of stainless steel AISI 304 grade and powder coated MS on outer surface.</li> </ul>	96 Trays	01

	<ul style="list-style-type: none"> <li>▪ Proper insulation with glass wool (at least ~60 to 75 mm) to avoid heat losses and air tight door closure arrangement</li> <li>▪ Proper distribution of heating elements for uniform temperature distribution.</li> <li>▪ Digital temperature controller with display of cabinet air temperatures and display of RH.</li> <li>▪ Fresh air inlet with filter and outlet with damper control valve.</li> </ul>		
4.	<p><b>Colour sorter</b></p> <p>Coffee color sorter for separation of coffee beans/berries based on quality.. The units should consists of,</p> <ul style="list-style-type: none"> <li>▪ Feeding and discharge mechanism for continuous processing of coffee berries/beans</li> <li>▪ Trichromatic (RGB) High resolution CCD line scan cameras (5400 pixels/2048 pixels)</li> <li>▪ LED High intensity lighting</li> <li>▪ Online display of product through LED screen</li> <li>▪ Ultrafast long life pneumatic ejectors with response time (~1ms) and long shelf life (~5billion cycles)</li> <li>▪ Automatic cleaning of the viewing area by wiper system</li> <li>▪ Automatic online calibration with self-check procedures</li> </ul> <p>The unit should be suitable positioned for easy feeding and discharge. All contact parts to be made of AISI304. Complete with starters, switches and all accessories for the smooth operation of the unit. Scope of supply includes matching compressor with air filter.</p>	100 kg/h	01
5.	<p><b>Multi mill</b></p> <p>High speed multi mill to crush green coffee bean. All contact parts including sieves (size of 2, 4, 6, 8 mm sieves) to be of AISI 304. Complete with one set of additional sieves starter, switches and all other necessary accessories for the smooth operation of unit</p>	100 kg/h	01
6.	<p><b>Steam jacketed kettle</b></p> <p>Tilting type, jacketed kettle (10/12 swg, inner/outer) mounted on MS structure and fitted with anchor type stirrer having Teflon scrapper. Fitted with a geared motor or VFD to ensure slow speed of the stirrer (6-25 rpm). Complete with steam pet cock, safety valve, pressure gauge, safety device to avoid</p>	150L	01

	<p>accidental tilting, motor and gearbox. All contact parts to be AISI 304</p> <p>Working pressure: 50 psig Hydraulic test pressure: 100 psig Working Volume: 75-100 L</p>		
7.	<p><b>Sparkler filters</b></p> <p>Sparkler Filter that is a totally enclosed air sealed leak proof filtration plant assembly consisting of filter cartridge assembly (~5 microns), AISI 304 filter plates, support screen having interlocking cups, which are fitted in the main AISI304 shell tank. The entire unit to be mounted on SS skid or trolley that is fitted with Teflon wheels for easy mobility. Provided with suitable pump (with stainless steel cover) for feeding liquid like coffee extract, bypass system &amp; safety valve, sample collecting device. Arrangement to be made for complete removal of liquid from scavenger plate. Complete with interconnecting pipes, control valves, starter, switches etc., for the smooth operation.</p>	250 L/h	01
8.	<p><b>Vacuum packing unit</b></p> <p><b>For packaging of solid/liquid foods</b></p> <p>Vacuum packing unit with flexibility to have Nitrogen and CO<sub>2</sub> flushed packing. Microprocessor control to facilitate programming, Digital display, Lid with sealing and trimming bars, fully integrated modular construction for easy maintenance and service, Double sealing and trimming of bag overhang, perfect high-pressure sealing even with thick folds, All contact parts to be AISI 304.</p>	100 packs/h	01
9.	<p><b>Drum type Coffee roaster with cooler</b></p> <p>For roasting of coffee beans and subsequent cooling</p> <p>Complete with feed hopper, heaters, temperature controller (max 250 degree centigrade), motor, sieves of suitable size (20-30 mesh) for cooling system. All contact parts to be made of AISI 304.</p>	50 kg/batch	01
10.	<p><b>Coffee grinder</b></p> <p>For grinding roasted coffee beans</p> <p>Complete with hopper, food grade grinding steel grindstones, step less adjustment for grinding, dispenser, motor, starter,</p>	50-60 kg/h	01

	switches and all other accessories for the smooth operation of the unit. All contact parts to be made of AISI 304.		
11.	<p><b>Extraction unit</b></p> <p>For extraction from coffee powder. Column type extraction unit with jacket for heating with steam/electrical. Water inlet, feeding mechanism for powder, outlet for extract, valves and all other accessories for the smooth operation of the unit. The unit to be mounted on suitable MS frame and insulated for prevention of heat loss.</p> <p>Column dimensions: L/D ~ 5 (14 Gauge) No. of columns: 03 MOC: AISI304</p>	5 kg (each column)	03
12.	<p><b>Bottle filling machine</b></p> <p>Semi-auto, pneumatic bottle filler for filling coffee extracts in PET/PP bottles. Complete with product tank, filling heads (2 nos.), auto volume controller (150-500 ml), bottle tray, motor and other accessories for the smooth operation of the unit. All contact parts to be AISI304 and unit to be mounted on Stainless steel stand of suitable height for easy operation.</p>	240 bottles/h	01
13.	<p><b>Cap sealing machine</b></p> <p>Table top PET/PP bottle sealing machine with motor and other accessories for smooth operation of the unit</p>	240 bottles/h	02

- Warranty: All the machines, including bought out items must be covered with warranty for one year (minimum).
- All bought out items (motor, pump, starters, switches, etc., are to be of standard make
- Fabrication to follow all GMP guidelines and sharp edges, grooves, crevices etc., to be avoided
- All the machines must be easy to operate, clean and maintain.
- Supply is complete with all necessary items for smooth operation

**Scope of supply includes supply, installation & commissioning of equipments at CSIR-CFTRI, Mysuru and successful demonstration of its performance.**