



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 - Enquiry for Millet Cleaning, Conditioning, Flour and Semolina Roller Milling Line and Fortification Unit

Corrigendum Title: Revised Technical Specification based on PBC

Tender Ref: A3/74195/2020 Date: 04-06- 2020

Tender ID: 2020_CSIR_492748_1

The revised final specification based on the discussion in Pre Bid Conference held on 15-06-2020 @ 10.30A.M. at Purchase Committee Room, CSIR-CFTRI Mysuru through Video Conference 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 09/July/2020.

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 except delivery schedule date i.e. 10-12 weeks from the date of issue of P.O (instead of 6-8 weeks as mentioned in our initial tender terms & conditions).

Revised Technical Specification for Millet Cleaning, Conditioning, Flour and Semolina Roller Milling Line and Fortification Unit based on PBC

SI No	Description of the Machine	Specifications
1	Intake Hopper	Intake hopper with coarse sieve and capacity of approximate 250 kg to hold the material. Slide gate for the capacity fixing. Bulk Density: 600 kg/m ³
2	Bucket Elevator: 5 Nos	Bucket elevator with top & bottom booth, belt made up of Nylon with geared motor, metal/plastic buckets, 4", RPM-100. Height of the elevator as per the design of layout. Motor: 2HP Capacity: 3000 kg/h
3	Magnet - 6 numbers	Permanent magnet with ease of removing for cleaning purpose without interrupting the flow. Dust tight closed unit. Online magnet. Magnet Strength: 2000 gauze (Minimum)
4	Size separator with aspirator attached*	Metal construction. Oscillating sieve box with 2 decks of sieves, hinged inlet and built on discharge box supported in machine frame on rubber bush. Withdrawable wooden sieve frame covered with screen. Automatic sieve de-clogging by rubber balls. Drive with 2 vibro motors with adjustable throw and angle. Adjustable aspiration channel with air control valve and large inspection window. Aspiration channel having adjustable front glass with balancing spring for proper distribution of stock. With illumination. Adjustment scale for the proper adjustment monitoring. Intermediate separator with airlock to remove and check the impurities separated.

		<p>Supply of extra frame with different sieves (4 sets)</p> <p>Connection to central aspiration.</p> <p>Vibro motor (2 Nos): 1 HP Capacity: 2000 kg/h</p>
5	Destoner	<p>With adjustable deck inclination and plexi glass with inspection window. Sieve box supported by rubber blocks. Withdrawable wooden sieve frame covered with steel screen. Connection to aspiration. With illumination. Access opening closed with rubber covers. Air regulating valve with vacuum indicator. Outlets equipped with rubber sleeves. Drive with vibro-motors with adjustable throw and angle. Medium pressure fan, cyclone and airlock.</p> <p>Vibro motor: 1HP Capacity: 2000 kg/h</p> <p>Fan HP :As per requirement and Air lock:1HP</p>
6	Screw conveyor: 3 Nos	<p>Trough made of 3 mm thick MS metal sheet. With hanger bearing at every 1.5 mts, with self-lubricating bearings. With geared motor. Length according to design of plant.</p> <p>Motor: 2 HP Capacity : 3000 kg/h</p> <p>One Screw conveyor for the intake hopper to elevator of 10 meter length</p>
7	Water Dosing unit with paddle type conveyor	<p>Water tank with water purifier system. Rotameter of water measurement upto 100 liter per hour, automatic sensor for the load check. Screw mixer (Paddle Type).</p>
8	Grain silo- Flour numbers Two for raw grains and two for conditioned grains	<p>SS fabrication, Round or square shape with multioutlets, discharging unit with aspiration with manual operated silo slide gate. High level sensor. 4 tons capacity each.</p> <p>Each with tube conveyor feeder along with frequency drives to control flow.</p>

		Raw Grain Bulk Density: 600 kg/m ³ Condition Grain Bulk Density: 500 kg/m ³
9	Polisher with fan	Abrasive polisher. Provision for adjusting the pearling degree as per requirement. Connection with aspiration. Heavy duty steel structure with motor. Cyclone and airlock. Grain pearling with upto 8% bran removal Capacity: 1000 kg/h Motor: As per requirement (HP)
10	Surge bin	With level Sensor, Inspection window, Multi outlets, Capacity: 250 kg Bulk Density: 500 kg/m ³
11	Common aspirator Fan + Reverse Jet Filter + Airlock	Common aspiration fan for the cleaning section. All the machines including elevators, conveyors, raw grain bins, aspirators and other machines of cleaning section to be connected with the aspiration fan. Filter with filter bags, solenoid valve for cleaning the bags with sequential control and blasting. Electronic timer and airlock. Fan Size: As per the requirement, Fan HP: As per the requirement
12	Aspiration ducting as per requirement	Made of GI sheet including required bends, straight pipes, Y's, elbows, control valves etc.
13	Down Grade Pipes (Cleaning section)	Down grade system spouting pipes and accessories comprising: straight pipes, branch pipes, diving pipes, bend segments, inspection spouts, over flow drums, joint sealing clips, rubber cover etc.

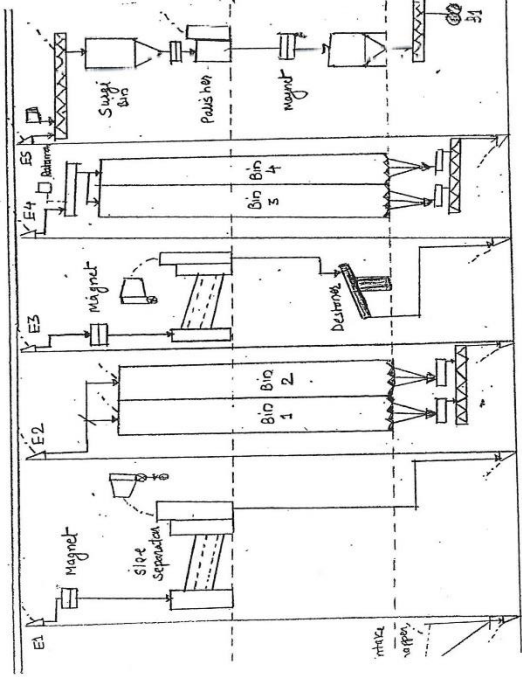
14	Roller Mill – 3 Nos Three Break and Three Reduction Passages.	Automatic roller mill, 500 mm length and 250 mm diameter, two sided with feeding mechanism to feed the grains. Feed control system depending on the load, auto engage and disengage system Motor Power: As per requirement of each passage.
15	HP fan, Filter Pneumatic lift, Cyclone, Air lock	High Pressure fan with motor and Pneumatic ducting. Filter with filler bags, solenoid valve for cleaning the bags with sequential control and blasting. Electronic timer and airlock. Pneumatic accessories: Pick up, Lift, cyclone, airlocks, inspection glass, rubber pack. Motor Power: As per requirement Airlock 4 Nos: As per requirement
16.	Plan sifter	Having 8 sections and 16 sieves sin each section. Suitable to handle the load. Sieves with sieves cleaner. Complete with motor and drive, Supply of sieve clothing nylon and wire mesh for entire sifter Motor Power: As per requirement
17	Semolina Purifier	Triple deck, with vibro motor, air adjustment valves with separate MP fans, cyclone and air lock for semolina purifier. Purifier vibro motor HP: As per requirement Fan Motor: As per requirement
18	Packing spouts -9 Nos	Packing stands with belts and slide for opening and closing.
19	Aspiration Ducting	Made of SS sheet including required bends, straight pipes, Y's, elbows, controlled valves etc.

20	Down Grade Pipes (Milling Section)	Down grade system in SS, spouting pipes and accessories comprising: straight pipes, branched pipes, dividing pipes, bend segments, inspection spouts, overflow drums, joint sealing clips, rubber cover etc.
21	Air Compressor	Multistage, reciprocating, V- Belt drive, arrangement with drive sheave and motor rails intake filter, wide and adjustable pressure switch (Auto cut-in and cut-off of compressor), pressure gauge, Auto drain valve, sub-micron fine filter, check valve, V-belts, belt guard, fly wheel, motor pulley, DOL starter etc. as a complete set ready to operate.
22	Micronutrient Feeder	Powder feeder with hopper and variable frequency drive to control the flow of output. Low level sensor. Hopper with vibro motor. Interlock system with flour conveyor. Bulk density: 500 kg/m ³
23	Flour Silo (2 Nos)	SS fabrication, Round or Square Shapes with vibro discharging unit with aspiration. High level sensor. 6 tons capacity each. Each tube with conveyor feeder along with frequency drives to control Flow. Each Capacity 3 Tons Bulk density: 500 kg/m ³
24	Vibro-sifter for Resifting	SS fabrication with two separation, capacity to match with 1000 kg/hr
25	Entoleter	For the output of 1000 kg/h
	Other Supplies	
26	Electrical Panel	Set
27	Motors for the above equipment	All electrical motors along with other electricals should conform to BIS standards. 415 voltage, 3 phase, 50Hz frequency with AC supply.

		All drive system and moving parts must be protected with the guards for the safety of the operators.
28	Cable and accessories	Set
29	Iron and steel	As per requirement
30	Should Include	<ul style="list-style-type: none"> • Drawing of general layout of the plant with flow sheet and all other accessories with details should be provided with quotation • Loading, Packing, Fright, Forwarding and Unloading at site • Transit Insurance of the equipments • Electrical works, control panel, cable ducting, panels and cables • Metal platforms in multi level as per the design and layout requirements • Mechanical, Electrical and Site Fabrication • Mechanical and electrical erection charges • All kind of Iron, Steel and erection of Platform, Hoppers, Bins, Bin Covers, Railings, Stairs, Chutes, Ducts, Pipes, Stands, Any Erection And Commissioning Materials Like Sheets, Channels And Angles • Tools and consumables used at the Site or Erection • GST or any other tax • Any type of Civil Work required for installation including drilling and closing of holes, anchor fasteners and plumbing works. • Standardization and trial runs and of entire plant for few days

* Only One separator, which can used for the pre-cleaning and first cleaning of millet grains

Millet cleaning section



Millet milling section

