

TECHNICAL SPECIFICATIONS AND OTHER ALLIED REQUIREMENTS

PUR/367/ERT/AP/E/2020-21/RET

Sl. No.	Item Description	Quantity
1	Supply of Rotary Trommel a) 100-150 kg/h, and b) 200-250 kg/h (Detailed specifications and drawing are as per Annexure-I & II)	 01 No. 01 No.

1. QUALIFICATION CRITERIA:

1.1 N.A.

2. DELIVERY

2.1. Vendor should complete delivery the ordered goods within 30 days from the date of Purchase Order at CSIR-CMER-Centre of Excellence for Farm Machinery (CoEFM), Gill Road, MERADO, Opposite GNE College, Ludhiana, Punjab, 141006.

3. WARRANTY

3.1. 12 months warranty must be provided by the supplier from the date of delivery and acceptance of the items/equipment at the User's laboratory/Institute.

4. PERFORMANCE SECURITY:

5.1 Vendor should provide Performance Security @3% of Contract Value/Invoice Value within 21(twenty-one) days after receipt of Purchase Order and it should remain valid for a period of 60 (sixty) days beyond the date of completion of warranty period.

5. BID SECURITY DECLARATION:

5.1 Vendor should provide Bid Securing Declaration Form as per Annexure – 5F provided in the Tender Document.

6. OTHERS

6.1 Optional accessories will not be considered for Price Evaluation.

ANNEXURE - I

Specification

Sl. No.	Description	Specification
1	Material to be screened	Compost
2	Capacity	100-150 kg/h
3	Screen RPM	45 - 60 RPM
4	Separation	Oversized & Undersized
5	Screen size	Dia.: Ø4 mm; Wire thickness: 1.0 mm
6	Screen material	Stainless Steel Net
7	No. of feed points	1 No.
8	Feeding Point (Elevation)	1.20 m (+GL)
9	Delivery Point	0.75 m (+GL)
10	Discharge hoppers	One side along the length
11	Dimension of Trommel	Dia. 500 mm × 2500 mm
12	Inclination	5 degree
13	Shaft	Pipe Dia.: Ø50 mm (min), Thickness: 2.0 mm; Length: 2700 mm (min), MOC: MS
14	Bearing	Roller Bearing; Make: SKF/NTN
15	Motor	2 hp, Single phase, 230V, 50 Hz, 1440 RPM; Protection: IP55 with DOL starter, Make: Crompton/ABB/BBL
16	Gear Box	1:10; Helical; Make: PBL/ELECON/STANDARD
17	Structure	Fabricated from ISMC (80×40×5 mm), ISA (50×50×6 mm)
18	Chute (Inlet & Outlet chute)	Fabricated from 3.0 mm thick MS Sheet
19	Inclined roller conveyor (Feeding Conveyor)	Length → 2000 mm Belt width → 300 mm Type of belt → Canvas/Rubber coated Thickness of belt → 5.0 mm Start of conveyor → +300 mm from Ground level Delivery of conveyor → +1500 mm from Ground level Angle of Inclination → 35-40 degree Spacing of bucket → 300 mm (AISI304) Dimension of bucket → 250 mm×200 mm (AISI304) Side guard → 250 mm Motor → 1 hp, 1 phase and 1:25 Gear Box Structural Frame → Hollow Square Pipe (50 mm × 3 mm)

N.B.: Please refer Figure-1 as conceptual model

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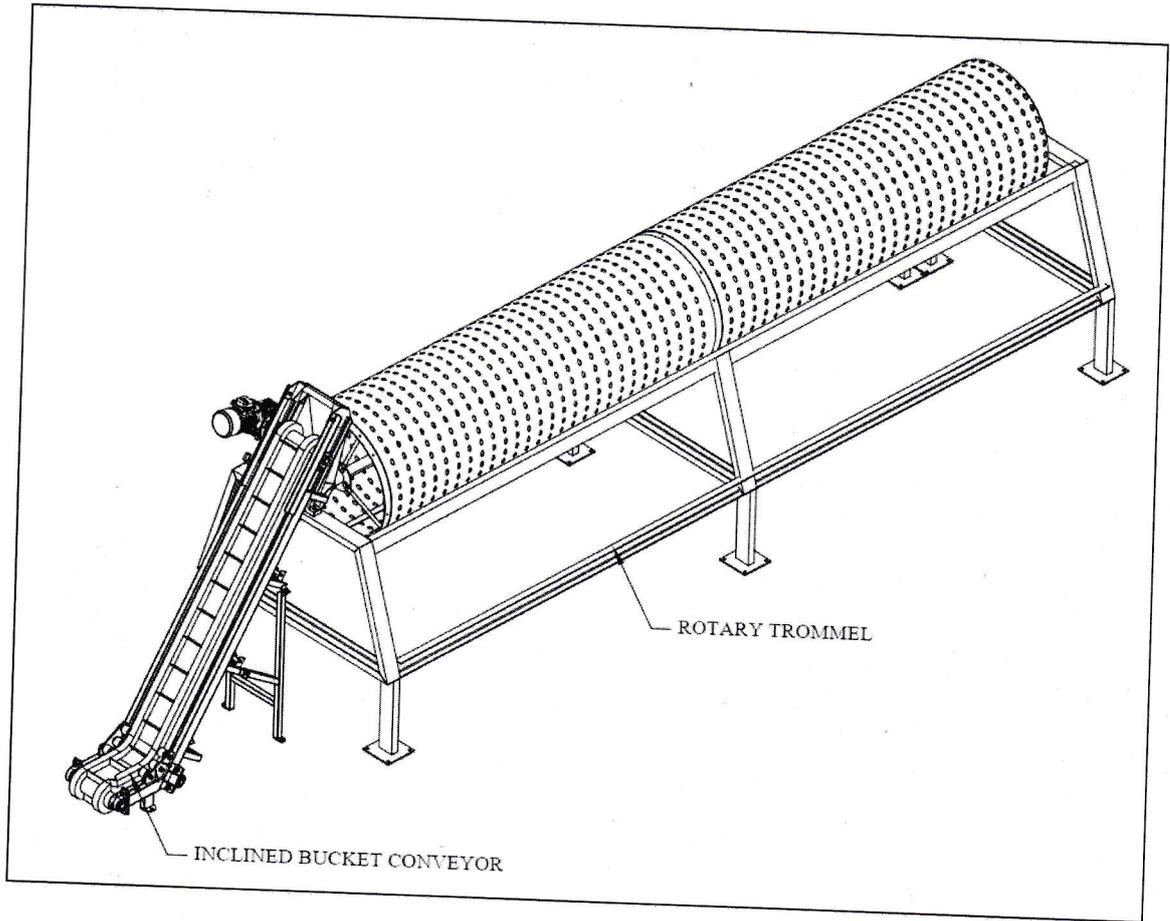


Fig-1: Rotary Trommel with Inclined Conveyor

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ANNEXURE - II

SI	Description	Specification/ Capacity
1	Rotary Screen	1 No.
2	Type of Motion	Rotary Motion Type (External Driven: No Central Shaft)
3	Material to be screened	Municipal Solid Waste
4	Capacity	200-250 kg/h
5	Screen RPM	45 to 60 RPM
6	Separation	Oversized & Undersized
7	Screen size	Dia: Ø 35 mm & Pitch: 50 mm
8	No. of feed points	1 No.
9	Vibratory Feeder (Inlet)	Electro mechanical feeder Foot Mounted Open Coil Spring Assembly 1 No. 0.5 HP, 3phase, 415 V, 50 HZ
10	Feeding Point (Elevation)	1.5 m
11	Delivery Point	1.0 m
12	Bottom hoppers	2 Nos.
13	Dimension of Trommel	Dia. 600 mm × 2500 mm
14	Screen material	AISI 304 Perforated sheet with 3 mm thick
15	Inclination	3 degree
16	Roller	Self-aligned type provides (IS 2069 Grade-A)
17	Roller Size	Ø250×100 mm width (IS 2060 Grade-A)
18	Bearing	Roller Bearing; Make: SKF/NTN
19	Motor	5 hp, 3 φ, 415V, 50hz, 1440 RPM; Protection: IP55 Make: Crompton/ABB/BBL
20	Gear Box	30:1; Helical; PBL/ELECON/STANDARD
21	Drive	Spur Gear drive
22	Structure	Fabricated from ISMC (100×50×5 (t)) ISA (50×50×6 mm (t)), wheel, Vibration isolation pads on support structure, Gasket at mating bolting faces to eliminate noise & vibration.
23	Chute	Fabricated from AISI 304 Sheet with 3.0 mm thick inlet & outlet chute

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