

Technical Specifications of Municipal Solid Waste Shredder

(Requirement Quantity 3 nos.)

1	Raw material	Municipal Solid Waste (MSW) containing waste biomass such as food waste, leaves and woody matter, plastics, papers, cloth, tyres. The feed may contain metal canisters, sand and other inerts
2	Moisture in feed	5-30%
3	Capacity	100 kg/hr (maximum)
4	Feed particle size range	10 mm to 500 mm
5	Required output particle size	5 mm or lower
6	Cutter MOC	Hardened Steel AISI 4140 or better
7	Shaft type/design/control	Double shaft, helical, automatic control
8	Drive, motor power	Electric, 15-20 HP or lower
9	Foot print	2-3 sq. m or lower

Other required features/requirements

- Dual shaft grinder should be provided with clearing comb to remove fibrous material.
- Heavy duty gear should be provided, and the gear reducer should be designed to handle with heavy shock load
- The cutters should be thermally hardened to increase resistance and sharpness assuring reliable grinding of toughest solids
- Low rotation of the cutters at even high torque
- Advanced cutter locking system shall be provided to eliminate daily requirement to tighten cutter stack while improving shredder performance and cutter life
- The bearing/seal housing material shall be ductile iron ASTM A536-84 or above
- The bearings shall be protected using sealed cartridge type mechanical seals with tungsten-carbide mating surfaces
- Quench shall be provided for upper seal lubrication
- The control panel shall be made of fire proof, SS 316 MOC or better, suitable for wash-down/outdoor wet weather and lockable
- Panel unit should be protected against overloads and equipped with fuses
- Pneumatic feed control (optional requirement, to be quoted separately)

- Combination starter with motor protection breaker should be provided
- Manual-Off-Automatic three position selector switch should be provided
- With the control panel functions in MANUAL or AUTO modes the grind, when encountering a jam condition, should stop and go into reverse and then revert to normal rotation operation
- Power on, run, fail and alarm lights (push to test type) should be provided
- Warranty terms: All the components quoted in the tender bid should be covered under warranty for 12 months
- Vendor must have at least 5 years of executing supplies of similar value and type to reputed organizations
- Vendor shall provide a list of 4 or more reputed organisations (Govt. or private) along with performance certificates as proof of experience / supply
- For any technical clarifications, please contact Mr. J. Nallasivam (nallasivamprpc@gmail.com, Mobile: 8072655194)