

Technical Specifications

for a 30 Ton pressing capacity Bale machine

The bidder should complete the "Compliance" column with either "Yes" or "No". Bids submitted without references to catalogues or data sheets will not be considered for technical evaluation. Bidder's failure to provide the information requested in the remarks columns may be a reason for the rejection of the bid. If any discrepancy is observed between the information provided by the bidder in the remarks column and the other technical data attached to the bid, the information provided herein shall take precedence.

No	DESCRIPTION	Compliance		Remarks / Compliance details
		YES	NO	
1.	Requirement: A vertical bale machine capable of baling recyclable material such as polythene, PET bottles, thin metal cans (aluminium, steel/tin) into a bound bundle.			
2.	Company registration number of the supplier registered under The Companies Act (No. 7 of 2007)			
3.	Machine Make			
4.	Machine Model			
5.	Manufacturer			
6.	Country of origin			
7.	Country of manufacture			
8.	The machine, including all its sub-components, shall be entirely new and unused.			
9.	The hydraulic working pressure should not be less than 28 metric tons at any point in operation.			
10.	Feed opening size should not be less than 0.24 m ²			
11.	Bale size should be not less than 0.17 cubic meters.			
12.	The maximum achievable platen pressure should not be less than 4 MPa (at the end of the stroke)			
13.	Cycle time should not be greater than 60 seconds.			
14.	Platen size			
15.	Number of force settings for compaction (give force values)			
16.	Number of hydraulic rams			
17.	Pressure and flow rate capacity of the hydraulic pump			
18.	A mechanism or device should be present in the machine to easily remove baled material from the machine.			
19.	Brand and model code of the hydraulic pump			
20.	The hydraulic system should be driven by a three-phase electric motor. Give the electrical power rating of the motor (in horsepower or kilowatts)			
21.	Brand and model code of the electric motor			
22.	All parts of the machine and structure prone to corrosion or oxidation should be painted with corrosion-preventing metal primer and abrasion-resistant paint.			
23.	The hydraulic pump, Drive system and Electric motor should be covered by suitable safety guards to prevent accidents and prevent dust accumulation.			
Electrical Installation and panel board				
24.	Total electrical power requirement of the machine at full load running condition (please give data).			

25.	Electrical wiring and panel board should be assembled using appropriately rated and quality equipment and wires standardised by the SLS 703 (part 2). Wire gauges and current rating of components should be chosen for the maximum measured starting current (RMS) multiplied by a safety factor of 1.4. All wiring and electrical installations should comply with BS 7671, EN 60204-1, SLS 1426, and SLS 1525.			
26.	Submit the electrical schematic drawing of the control panel. Sufficient measures for overcurrent protection, overvoltage protection, undervoltage protection, current leakage protection, and phase failure protection should be incorporated in the panel board using an MPCB and an RCBO.			
27.	Power supply phase indicators (3) and a machine power-on indicator should be provided on the control panel.			
28.	All electrical components should comply with IP54, and electrical enclosures should comply with IP65.			
29.	Manual ON/OFF switch should be provided with MPCB (if not included with MPCB, a separate Star-Delta Y-Δ Starter switch should be provided in an IP54 or better enclosure). Please specify the brand name, model number, and country of manufacture of the Star-Delta Y-Δ switch (if provided separately)			
30.	MPCB (Motor Protection Circuit Breaker) should be provided for phase failure protection, unbalanced phase protection, phase sequence protection, overload protection and short circuit protection. 6.3A current rating, Adjustable thermal trip (overload) range 5-8A (motor circuit category braking capacity $\geq 10\text{kA}$). Should include manual switching (ON/OFF) with at least 12A contactor rating, with separate start and stop push buttons, and electromagnetically latching. Should be in an IP54 or better enclosure. Please specify the brand name, model number and country of manufacture.			
31.	All wires routed within the machine structure should be passed through suitable industrial-grade PVC conduits.			
32.	Panel board with operating switches should be mounted on a wall or on the machine structure, following standard safety precautions.			
33.	An emergency stop switch should be provided at an easily accessible location on the machine.			
Alternative Designs				
34.	State whether the design of the machine submitted with this bid should be considered as an alternative design which can satisfy the listed requirement specifications above, but with different technical and design specifications. Any objections regarding the requirement specifications should be submitted to the relevant procurement entity at least 7 days before the closing date of the bid.			
Technical Literature				
35.	Documents of technical specifications, images, and design drawings of the machine should be submitted with the bid. The documents should specify all major dimensions, material types, fastening methods and component ratings. All technical literature should be from the original equipment manufacturer.			

Manuals			
36.	Operations and maintenance manuals should be supplied with the equipment. All literature should be in English and in printed (hard copy) form.		
Warranty			
37.	A minimum of two-year warranty is required, including for Hydraulic oil seals, Bearings, Piston Rods, Piston Rings, Relays, Timers, Contactors, Transformers, and Limit Switches. Warranty-exempted parts and items should be clearly mentioned in the bidding document. Damages caused by heavy impact, misuse or due to forces of nature shall not be covered by the warranty. Warranty repairs should be provided on-site, free of charge. Submit a detailed warranty document stating the terms and coverage.		
Demonstrating the qualifications of the supplier and the manufacturer			
38.	Clearly mention certifications obtained by the company (e.g. from ISO, CIDA, FMRC, IESL, CEA, etc.). Documentary evidence for the manufacturer's and supplier's past performance, experience, awards received, and any recommendations received from government institutions can be submitted to further demonstrate the qualification of the supplier.		
Past performance of the supplier			
39.	Attach client lists of related machinery. Client contact information, machine type, capacity, number of units purchased and year of purchase should be mentioned in the list. (It will be considered favourably in the technical evaluation).		
Product certifications			
40.	Any certification confirming the performance capability, quality of materials/components, and durability reports/test reports of the quoted machine model obtained from a third-party testing agency will be considered favourably in the technical evaluation. Such certificates should contain the model number and capacity specification of the machine.		
After-sales service			
41.	The supplier should submit a document declaring the capability and commitment of the company to come to an agreement to carry out after-sales services after the warranty period.		
42.	Give details of the free periodic services provided for the machine. Periodic maintenance services recommended by the manufacturer should be provided absolutely free by the supplier during the warranty period. Specify the number of services provided.		
43.	The supplier should furnish a letter guaranteeing the availability of spare parts for a period of ten years.		
Intellectual property			
44.	The bidder should furnish a letter stating that the supply of machinery according to the submitted bid does not violate any industrial designs or patents registered under the Intellectual Property Act No. 36 of 2003. Furthermore, if the bidder has obtained such registrations under the said Act, the registration dates and numbers should be clearly stated.		
Installation and testing			

45.	Cost of transportation to the installation site, and cost of installation on site should be included in the bid price.			
46.	A three-phase electrical supply will be available in the installation location. Required wire length is given in the Price Schedule. Cost of labour and material for installation should be included in the bid price.			
47.	Power supply to the machine should be wired from a suitable tapping point by the supplier according to prevailing industrial standards (providing necessary conduits, lugs, connectors, etc.). All wire routings done on the floor should be made underground. All wiring should be secured with industrial-grade PVC conduits and with appropriate cement/masonry work to amend any damages caused to the walls or cement/concrete floor. Any specific civil works required for the installation should be carried out without additional charges.			
48.	The machine should be tested on site under full load capacity.			

Mechanical horsepower (Imperial) 1 hp(I) = 745.7 Watts.

- Price quotations should be valid for a period of at least 90 days.
- The above information sheet should be duly filled out. For each description component, the bidder's offer column should be commented or remarked with accurate and sufficient information. Give additional schematics, drawings, illustrations or pictures where necessary.
- Specification details published by the manufacturer of the offered model should be submitted with the price quotations.
- Minor deviations are accepted if no bid satisfies the requirement.
- Instructions for preparing bidding documents are annexed to this document.

Price Schedule (in Rupees)

1	2	3	4	5	6	7	8	9	10
Line-Item N°	Description of Goods	Country of Manufacture	Brand and model code	Warranty	Unit	Qty	Unit price	Price for item (without VAT) = [7] x [8]	VAT (if applicable)
1.	30T Bale machine supplied according to the given specifications				Units	1			
2.	A long, strong, straight rod (needle) made of stainless steel used to pass twine/rope through the bale.				Units	1			
3.	Electrical phase supply wires – 7/0.67 2.5 mm ² single core copper wires with PVC insulation (rewire the distribution from the new distribution panel to the existing 20T machine and to the new 30T machine)		ACL /Kelani /Orange /Sierra		Meters	110m			
4.	Earth wire – 7/0.67 2.5mm ² single core copper wire with PVC insulation (new machine to earth bus bar), & (existing machine to earth bus bar). Use the existing wire for the main earthing conductor (from the earth rod to the earth bus bar)		ACL /Kelani /Orange /Sierra		Meters	110m			
5.	PVC electrical conduits or PVC trucking to route the above wiring with necessary bends, clips, and fastening materials		Krypton /Polychrome		Meters	Pipe 35 Bend 45 Clip 25			
6.	7.5 kW rated star-delta switch with 9-12 Amperes AC-3 duty contactors (if provided separately)				Units	1			
7.	4-pole isolator switch (16A rating)				Units	1			
8.	MPCB of thermal current rated in the range 6–10 A (adjustable) and breaking capacity 10 kA at 400 V				Units	1			
9.	4-pole RCBO rated 10 A, 100 mA (Type C)				Units	1			

10.	Powder-coated 1.2 mm thick Galvanised Steel (GI) IP65 Enclosure (surface mounted with brass screws) for housing the electrical isolator of the machine, MPCB, RCBO and star-delta switch (if provided separately)						1			
11.	Construct a brick chamber with a cover slab for the existing earth electrode pit.						1			
12.	Supply and fix a 60A, 3-phase distribution panel board, including (30x30x30) cm metal enclosure box, with a complete copper bus bar set. Fix with brass screws.						1			
13.	40A rated 4-pole main isolator/disconnector load switch, suitable for frequent on/off operation, and enclosure-mounted for the above-provided distribution.						1			
14.	Required materials - Lugs, bolts, clips, spring-clamps, electrical connectors, screws, Terminal Blocks, Junction box, colour caps, and insulation sleeves for electrical installation									
15.	Inland transportation charges, transportation insurance, loading, unloading, moving, hoisting equipment charges and other services									
16.	Complete installation (technical and labour) charges									
Total										

Total bid amount (without VAT) (Total of column 9) in words

Name of person authorised by the company to bid on its behalf

Bid validity Contact numbers

Signature of Bidder Date company seal: