

Detailed Specification

Enquiry:MM/172/G30056

Contact Details

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Please submit your offer for supply of the following items as per the instructions, technical specifications and other terms and conditions specified herein/ attached.

Note:

1. The delivery period mentioned in the BoQ is our indicative requirement. You may offer your earliest delivery period.

Please refer our above referred enquiry number in all correspondence.

SL No.	Material Code	Detailed Specification/s	Quantity	Unit of Measure
1	671119900	13 PERSONS PASSENGER LIFT FOR BAGGING PLANT FACT-CD, AS PER ATTACHED TPS NO. CD-BP-LIFT-TPS	1	NO
2		Installation, Testing, Inspection and Commissioning of a 13 Passengers (884 Kg) , ACVVVF micro Processor based full collective operation Lift conforming to Technical Procurement Specification No. CD-BP-LIFT-TPS & documents attached with the Purchase Order. The scope of work also includes preperation & submission of necessary documents, certificates and drawings required for application for statutory inspection of passenger lift by Central Electricity Authority, Liaison works with CEA officials for conducting audit, works if any as per the observations made by auditor, preperation of compliance report and completion of inspection process.	1	LS
3		Comprehensive Maintenance of above 13 Passengers lift in Bagging Plant with all accessories like Lift Control Unit, VFD, Car, Mechanical & Electrical Components, etc conforming to Technical Procurement Specification No. CD-BP-LIFT-TPS (excluding first one year Guarantee period)- YEAR I	12	MON
4		Comprehensive Maintenance of above 13 Passengers lift in Bagging Plant with all accessories like Lift Control Unit, VFD, Car, Mechanical & Electrical Components, etc conforming to Technical Procurement Specification No. CD-BP-LIFT-TPS (excluding first one year Guarantee period)- YEAR 2	12	MON
5		Comprehensive Maintenance of above 13 Passengers lift in Bagging Plant with all accessories like Lift Control Unit, VFD, Car, Mechanical & Electrical Components, etc conforming to Technical Procurement Specification No. CD-BP-LIFT-TPS (excluding first one year Guarantee period)- YEAR 3	12	MON



SPECIAL TERMS AND CONDITIONS

Special Terms for Supply:

- 1) Offer shall be as per the TPS CD-BP-LIFT-TPS.
- 2) Pre Qualification Criteria is provided and only Pre Qualified Bids shall be considered for Technical Evaluation.

Special Terms and conditions for Installation

1. The work shall be carried out as per the conditions stipulated in the Technical Procurement Specification No. CD-BP-LIFT-TPS attached along with the Purchase Order for 13 Passenger Lift.
2. Installation, testing & commissioning works shall be completed within One Month from the date of giving clearance to start the work. The AMC works for lift shall start only after the successful completion of guarantee period (12 Months from the date of commissioning of Passenger Lift) and shall continue for next Thirty Six Months.
3. The workers shall be provided with necessary tools, testing equipments and safety equipments.
4. The lift supplier shall issue ID card to their workforce.
5. The workers shall observe all the labour rules and regulations in force.

Special Terms and conditions for CAMC

1. The work shall be carried out as per the conditions stipulated in the Technical Procurement Specification No. CD-BP-LIFT-TPS attached along with the Purchase Order for 13 Passenger Lift.
2. The AMC works for lift shall start only after the successful completion of guarantee period (12 Months from the date of commissioning of Passenger Lift) and shall continue for next Thirty Six Months.
3. The workers shall be provided with necessary tools, testing equipments and safety equipments.
4. The lift supplier shall issue ID card to their workforce.
5. The workers shall observe all the labour rules and regulations in force.
6. The lift supplier should have round the clock contact telephone number.
7. In case of Emergency, their authorized supervisor shall be available at site on short notice and all efforts shall be made to normalize, at the earliest.
8. The lift supplier is responsible to keep necessary spares and consumables, for due performance of the contract.
9. The complaint register should be maintained as per the instructions of the Engineer-in-charge.
10. The AMC contract can be terminated by FACT with one month prior notice, if the performance is not satisfactory.
11. Bill payment processing period shall be 7 days from the date of final approval for the payment recommendation from FACT-CD Electrical Department.
12. The work shall be done by regularly and systematically examining lift travel operations at all landings, adjusting/ lubricating the mechanical parts, repairing/ replacing all electrical / mechanical spare parts including machine motor, controller and other parts if required etc., as per terms, conditions and specifications attached in Technical Procurement Specification No. CD-BP-LIFT-TPS.

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Note : Part-II Price bid is attached as separate document for quoting the rates by the bidder.

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SCOPE OF WORK

Sl. No.	Description	Required
1.0	Supply of a 13 Passenger (884 KG), AC-VVVF microprocessor based full selective collective automatic operation Lift conforming to attached specifications/documents	YES
2.0	Submission of Civil & Electrical drawing for construction and electrification of the lift shaft, well and machine room.	YES
3.0	Installation, testing and commissioning of a 13 Passenger (884 KG), AC-VVVF microprocessor based full selective collective automatic operation Lift conforming to attached specifications/ documents	YES
4.0	Submission of necessary drawings & dully filled documents as per CEA Regulation 2023 for application for inspection by Central Electricity Authority, Govt. of India and doing necessary liaison works for successful completion of CEA Inspection of 13 Passenger Lift in Bagging Plant.	YES
5.0	Comprehensive AMC for 3 years after 1-year guarantee period.	YES



		VENDOR DATA REQUIREMENTS			CD-BP-LIFT-VDR		
					Page 1 of 1	R0	
PROJECT: SITC OF 13 PASSENGER (884 KG) LIFT IN BAGGING PLANT				ITEM: 13PASSENGER LIFT			
				TPS. NO: CD-BP-LIFT-TPS			
STATUS: <input checked="" type="checkbox"/> COMMITMENT		ENQUIRY <input type="checkbox"/>		P.O. NO.:			
Sl. No.	Grp. code	Description	Offer	After commitment			@@
			Qty.	Qty.	Lead time in weeks		Final
					Reqd.	@ Propd	
1	B	Duly filled in Technical particulars of 13 Passenger (884KG) lift as per proforma enclosed	1S				1S
2	A	Dimensioned general arrangement drawings of lift and structural requirements details	1S	2P	4		2P+S
3	A	Electrical schematic drawings	1S	2P	4		2P+S
5	A	Structural Drawing of Lift Shaft, Lift Well & Machine Room		2P	4		2P+S
6	A	Electrification Scheme of Lift Shaft, Lift Well & Machine Room		2P	4		2P+S
7	B	Schedule of material / components	1S	2P	4		2P+S
8	B	Unpriced copy of price data sheet	1S				
9	B	Type test certificates as per relevant IS	1S	2P	4		2P+S
10	B	Routine test certificates		2P	4		2P+S
11	C	Operation and maintenance manuals		2P	4		2P+S
12	C	Spare parts list		2P	4		2P+S
13	B	Duly filled and signed Compliance statement as per Performa enclosed	1S				1S
14	B	Detailed Schedule of work execution		2P	4		2P+S
Legend:		Group code: A - For review and detailed Engineering, B - For review, C - For information and record					
		Document type: R - Reproducible, P - Print, M – Microfilm; S – Soft copy					
		Vendor shall fill in proposed lead time if different from the required lead time.					
Notes: @		Each set of final documents shall be submitted in a folder. Two such folders shall be packed and dispatched with the equipment. Final documents shall be submitted in soft copy also.					
@@							
1	25-06-2024		ATG	SR	BKN		
REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED		
FACT CD							

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SPECIFICATIONS / REQUIREMENTS FOR 13 PASSENGER (884KG) LIFT

1	Type/Service	13 Passenger lift – with machine room, Full Collective Operation with/without attendant
2	Load	884KG
3	Travel.	9 Meters (approx.)
4	Contract Speed	1.0 Meter/ sec
5	No of Stops & Floors	Customer Requirement: Ground and 1 upper floor, 2 stops, 2 levels, 2 openings. Additional floors/ stops/ openings shall be included by the vendor for machine room access depending on the design of passenger lift and site conditions.
Note: All indicators, car push button panel controllers, floor selectors shall have sufficient space to accommodate the units for all service.		
6	Applicable Standards	IS 14665 Part 1, 2, 3, 4 & 5 up to the latest amendments
7	Type of Drive	AC -VVVF microprocessor based full collective operation with or without attendant (Jerk free start & stop))
8	Control	Full collective selective operation with or without attendant
9	Position of machine room	As per the design of the manufacturer.
10	Size of Lift well	2500mm (W) x 1900mm (H) approx.
11	Pit depth lift of well	1600mm approx.
12	Internal size of car Platform	Clear internal depth: 1100 mm Clear Internal Width: 2000 mm Clear Internal Height: 2100mm Entrance door Width: 900 mm

13	Construction, design & finish of car body	<p>Car frame shall be in accordance with clause -4 of IS 14665 (Part 4-Sec3)2001 made of sheet steel of rigid construction to withstand without permanent deformation the operation of safety gear.</p> <p>Car platform shall be of framed construction and designed on the basis of rated load evenly distributed & dimensions conforming to IS:14665(part-I) 2000.</p> <p>Car roof shall be solid type capable of supporting a weight of at least 140 KG and as per IS 14665(Part -4 Sec 3) 2001.</p> <p>Car shall be enclosed on all sides by suitable thickness scratch proof stainless steel with Moon rock/Hair line finishing to withstand without deformation a thrust of 35 kg applied normally at any point and as per IS 14655 (part - 4/Sec 3).2001.</p> <p>Car shall have Anti Skid SS chequered plate flooring.</p> <p>Car should have elegantly finished false ceiling & a clear height of 2300mm must be ensured, containing fan for ventilation, Vandal proof & glare free LED Light fittings.</p> <p>Floor position scroll type indicators. Stainless Steel hand rail not less than 600mm long at 900mm above floor level (shall be fixed adjacent to the control panel) etc. to be provided.</p>
14	Flooring	Anti Skid SS chequered plate flooring
15	Car entrances	<p>One No. 900mm wide x 2000mm high power operated automatic center opening horizontal sliding door suitable thickness stainless steel scratch proof Moon rock/Hair line finish. The car and the door shall be provided with tamper proof full length infra red door screen/curtain covering the entire height of the door with minimum 120 beams with sensitive reopening arrangements on the moving edges which are likely to come in contact with persons entering or coming out of the car. Door pressure limiter shall be provided as secondary door safety. The distance between landing sill and the sill on car platform shall not be more than 30mm.</p>
16	Car light	Power Saving Vandal proof & glare free LED light fittings (minimum 150 lux). Automatic car fan off (Energy Save mode) provision shall be made.
17	Call indicator in car	Fade proof Luminous call buttons digital b) Position indicator in car: Above the car door. Digital scroll type indicating position and direction

18	Car operating panel	<p>Full length Stainless Steel Car Operating panel inside the car with integrated battery backed Emergency Light and Push to Talk system & shall consist of the following:</p> <ol style="list-style-type: none"> 1) Key operated Switch marked to indicate "Attendant" "Automatic Operation". 2) Push button for each floor served. 3) Emergency " STOP" push button. 4) Emergency alarm push button (Battery operated) 5) "UP & DOWN" direction indicator. 6) Buzzer. 7) Non-Stop button. 8) Over load indication 9) Door Close and Open Push Button 10) Overload warning Audio & Visual indicator, inside the car (Overload Device - Lift shall remain stationary with door open <p>The device used for emergency signals should incorporate a feature that gives an immediate feedback to the car passengers that the device has worked properly and the signal has passed on to the intended supplier.</p>
19	Landing Entrance	All on the same side and in Front Only
20	Car open size and type of operation	900mm wide x 2000mm high Stainless Steel centre opening horizontal sliding door having self closing facility and emergency key opening facility at all landings including landing door frames. The landing door and car door are mechanically interconnected so as to open or close simultaneously. The electro mechanical latch of landing door should be so designed that it is inaccessible or invisible to the passengers in the car in case if the car door is opened for any reason from inside.
21	Leveling	Levels between the car sill and landing sill shall not exceed +/- 12mm.
22	Machine room & Machinery	The machine shall be energy efficient designed for heavy duty and suitable for lift operation. Sound reducing materials preferably rubber pads shall be provided under elevator machine. Power transmission system may be of geared/gearless type
23	Maintenance free Battery & Battery Charger	Battery shall be Maintenance free designed to illuminate the LED light used for car lighting, and other essential controls with trickle charger with inverter's power pack
24	Emergency light/alarm	Emergency light (rechargeable battery operated) in car

25	Emergency Bell	Emergency alarm bell (rechargeable battery Operated) at ground floor
26	Fan	Lift car should be adequately ventilated using Fan(s), which should be located above false ceiling. Low noise cross – flow fans will be preferable.
27	Control and indicators	UP/Down direction arrow indicators with Fade Proof Two luminous push buttons for intermediate landings and single push button for terminal landing with call direction indicators, scroll type, indicator LED type, for showing digit type position and direction, encompassed in one composite unit. Hall Gong to indicate arrival of car at each landing
28	Fireman Switches	Fireman switches as per IS shall be provided in the ground floor to enable the fire authority to take over the complete control of the lift in case of emergency
29	Telephone outlet	One plug in socket in lift car with necessary spare cable pair in trailing cable and the terminal out let provided in machine room and control room i/c supply of telephone instruments at 3 points (car, machine room, control room). The system should also work in absence of power supply to lifts
30	Counter weight	Provided in a structural steel frame as per clause 3 of IS 14665 (Part4/Sec 1 to 9) 2001 amended up to date. A suitable guided structural steel frame with appropriate filler weights shall be furnished to promote smooth and economical operation
31	Terminal buffers	Terminal buffers shall be installed as a means of stopping the car and counter weight at the extreme limits of travel and shall be spring buffers. Buffers in the pit shall be mounted on steel channels or suitable concrete blocks
32	Guide	The guide rails shall be in accordance with clause 3 of IS 14665 (Part 4 – Sec 2) 2001. Only machined guide rails are permitted for cars for Passenger lift. Formed sheet metal rails shall be used up to of 1.75 MPS for counter weight applications
33	Safety Gears	As per section 4 of IS 14665 (Part4/Sec 1 to 9) 2001
34	Over speed Governor	Speed governor for controlling excessive speed shall be as per IS 14665 (Part 4/Sec 4) : 2001
35	Ropes	Hoisting suspension ropes as per IS 14665(Part-4-Sec 8)2001
36	Reverse phase and phase failure relay	Reverse phase & phase failure relay shall be provided to protect the machine against phase reversal and failure of any phase



37	Hand winding wheel or handle	In case the normal working fails, it shall be possible to move the lift car to the nearest landing manually. The manual operation shall be done by means of a winding wheel or handle mounted on the end of the motor shaft. The up or down direction of the movement of the car should be clearly marked on the motor or at suitable location. A warning plate in bold signal red colour advising the maintenance staff to switch off the mains supply before releasing the brake and operating the wheel is to be prominently displayed
38	Steel Ladder	A permanent MS Step ladder with hand rail shall be provided in the pit with minimum width of 1 Metre
39	Auto/Attendant key & Non stop button	An auto attendant key and alarm stop button shall be provided in the car operating panel to facilitate these operations
40	Lift Announcement	A digital voice annunciation system for announcing the car position as per relevant IS during travel time shall be provided.
41	Miscellaneous	All electrical wiring shall have flame resisting moisture proof insulation and will be run in heavy gauge metal conduit/casing. The trailing cable between the car and lift well shall be multi core type designed for lift services and shall have flame resisting moisture proof covering cables and shall conform to relevant IS amended up to date. All exposed metal parts especially black iron parts shall be properly painted with good quality paint after erection and before commissioning the lift. The supply and erection of lift shall conform to the latest lift Act in force and modern lift practice in all respects. All wiring and earthing etc. shall conform to IE rules and regulations. Double earthing in the lift shaft with busbar in machine room to be provided. All the electrical supply lines and apparatus in connection with the lift installation should be such constructed, installed, protected, worked and maintained that there is no danger to persons there from. To do that all the exposed parts should be duly insulated, equipments should be securely earthed in accordance with the recommendations made in IS 3043: 2018 and also in conformity with the latest provisions of Indian Electricity rules.
42	Electrical supply	415V, 3-Phase, 50 Hz, AC · The entire lift equipment should be suitable for operation at +10% to - 20% of the rated supply voltage
43	Auxiliary required	230 V, single phase, 50 Hz, AC
44	Spares and Instruction	A set of tool kit shall be provided including operation and maintenance and special instructions if any for care and maintenance during lift operation manuals
45	Automatic / Emergency Rescue Device (ARD/ERD)	Required with sufficient power backup.





46	Guarantee & Free Maintenance	Supplier shall give a guarantee of at least twelve months from date of commissioning against any design/ material/ manufacturing defects and poor workmanship. Under guarantee period supplier shall conduct periodical inspection of lift, general cleaning, milling, greasing adjustment & checking of all safety device, etc. as required and rectify the complaints within 24 hours.
47	General	Suitable scaffolding in the hoist way and cutting work etc. shall be done by the supplier only. Minor civil works, if required, shall also be provided by the firm
48	Reference	<p>Unless otherwise stated herein, design, installation, testing and commissioning of Lift shall comply with the latest edition of all applicable standards issued by the Bureau of Indian Standards and other relevant local regulations applicable.</p> <p>The lift outline dimensions, code of practice for installation, operation & maintenance, safety rules, components, and testing & inspection, etc shall conform to following IS specifications.</p> <p>1) IS-14665 (Part 1 to 5) latest versions as amended up to date for Electric Traction Lifts including all clauses applicable for Passenger Lifts.</p> <p>2) Indian Electricity Rules 1956 with latest amendments.</p> <p>3) Indian Electricity Act 2003 with latest amendments.</p> <p>4) Rules and Regulations prescribed by local authorities as applicable.</p> <p>5) Elevator shall be provided with earthing arrangements as per National electrical code 2011, IS 3043: 2018.</p> <p>6) Any additional requirement imposed by statutory or government authorities not listed above shall also be complied with.</p>
49	Environmental Conditions	<p>Maximum Temperature : 50 °C</p> <p>Minimum Temperature : 20 °C,</p> <p>Maximum Relative Humidity:98%. Dusty & highly corrosive environment.</p>





50	Inspection & Testing of Passenger Lift.	Passenger Lift material shall be inspected at the factory as per the Latest IS specification before dispatch to site and the necessary test certificate shall be furnished along with the lift. It is the responsibility of the supplier to get the Lifts inspected by Designated Inspecting Authority of the Government
51	Lead time for delivery of supply items for completing civil construction	The vendor shall supply the materials only after 8 months from the date of issue of drawing of civil structure. The time is for completing civil structures as per design of the vendor. Vendor shall visit the site to clarify doubts regarding the civil structure as and when required. Guarantee period for the supplied item shall be counted from the date of commissioning only.

Note:-

All major civil works like lift well and machine room are in the scope of FACT. But for the minor civil works for cable entry, fixing of control panel, push button stations, indications, limit switches, ropeway, etc. are in vendor's scope.

The vendors are expected to visit the site and familiarize with site conditions before quoting.

The successful vendor shall co-ordinate with FACT-CD Civil Department regarding the lift shaft / machine room/ pit civil constructions.







TECHNICAL PARTICULARS OF LIFT OFFERED

(TO BE FILLED BY VENDOR)

A. General:	
i) Name of Manufacturer	
ii) Country of Manufacture	
iii) Capacities (Persons/Weight)	
iv) Service:	
v) Speed of Travel	
vi) Height of Travel:	
vii) No of Floors Served:	
viii) No of Openings	
ix) Position of Counterweight	
x) Type of leveling Method:	
B. Machine:	
i) Position of Machine:	
ii) Motor:	

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iii) Electric Supply Particulars for which it is suitable for Operation:	
C. Brake:	
i) Type:	
D. Cars & Doors:	
i) Outside Dimensions of Car:	
ii) Inside Dimensions of Car	
iii) Construction of Car:	
iv) Design/Type of Enclosure of Car:	
v) Details of Flooring:	
vi) Attachment & Fitting inside the car:	
vii) Car Doors:	
a) Size	
b) Operation	
c) Construction, Design & Finish	
viii) Landing Doors:	
a) Size	
b) Operations	
c) Construction, Design & Finish	

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E. Safety Devices:	
i) Car Safety – type	
ii) Counter weight safety type	
iii) Doors inter locks in car – type	
iv) Door locks in landing – type.	
F. Other safeties included in the offer:	
G. Required Pit dimensional details	
H. Loads coming on the Roof slab and machine room floor slab.	
I. Location of hooks and its capacity in machine room	
J. Door opening size required in RCC well	
K. Any other structural requirements like RCC wall or Additional RCC beams (if required).	

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GENERAL CONDITIONS FOR LIFT INSTALLATION WORK

1.0 SCOPE

These General conditions indicate the requirements and precautions to be taken during the execution of Lift Installation works to ensure efficient, safe, economical and practical use of materials and equipments including prevention of risks and fire hazard.

1.1 RELATED DOCUMENTS.

- (i) Each work has its own particular requirements. These General conditions shall be read in conjunction with the standard conditions of contract contained in FACT contract forms concerned, the tender specifications, schedule of work, drawings & other documents in the tender papers connected with the particular work.
- (ii) In the event of any discrepancy between these General conditions & special conditions, the requirements & conditions as per the latter shall have overriding value & shall be followed..

1.2 COMPLETENESS OF TENDER

All sundry fittings, assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections as required, & all other sundry items which are useful & necessary for proper assembly & efficient working of various components of work shall be deemed to have been included in the tender, whether such items are specifically mentioned in the tender documents or not.

1.3 WORKS TO BE ARRANGED BY THE FACT

Unless and otherwise specified in the tender documents, the following works shall be arranged by the FACT:

- (i) Construction of Lift shaft, well and machine room and electrification of lift shaft and machine room as per drawing submitted by the Lift Supplier.
- (ii) 415V, 3 phase, 50Hz. Power supply at a single point.
- (iii) Telephone connection from the nearest point.

1.4 WORKS TO BE DONE BY THE CONTRACTOR

Unless & otherwise mentioned in the tender documents, the following works shall be done by the contractor, & therefore their cost shall be deemed to be included in their tendered cost:-

1. Foundations for equipments and components where required, including foundation bolts, sealing of all floor openings provided by him for pipes and cables, from fire safety point of view, after laying of the same.
2. Painting at site of all exposed metal surfaces of the installation other than pre-painted items like fittings, fans, switchgear / distribution gear items, cubicle switch board etc. Damages to finished surfaces of these items while handling and erection, shall however be rectified to the satisfaction of the Engineer-in-charge
3. Temporary shed if required over the storage space & locking arrangement thereof, watch and ward of materials & completed installation till completion of the work.
4. Testing and commissioning of completed installation.
5. Arranging Scaffolding, Safety Belts, Safety Helmets and Safety Gloves etc. for his workers at site
6. Providing safety guarding for openings at landing doors including providing danger sign boards
7. Removing debris and disposing the same as permitted by authorities concerned. The site shall also be kept neat & clean during execution of the project

1.5 STORAGE AND CUSTODY OF MATERIALS

Suitable storage location nearer to site shall be provided by the FACT free of cost to the contractor, subject to availability. However, their proper storage and safe custody shall be his responsibility till the final taking over of the installations by the Department.

1.6 TOOLS FOR HANDLING AND ERECTION

All tools and tackles required for handling of equipments and materials at site of work as well as for their assembly and erection and also necessary test instruments shall be the responsibility of the contractor

1.7 CO-ORDINATION WITH OTHER AGENCIES

The contractor shall co-ordinate with other agencies involved in the building work so that the building work is not hampered due to delay in his work. Recessed conduit & other works, which directly affect the progress of building work, should be given priority.

1.8 CARE OF BUILDINGS

Care shall be taken by the contractor to avoid damage to the building during execution of his part of the work. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of his work from the site.

1.9 STRUCTURAL ALTERATIONS TO BUILDINGS

- (i) No structural member in the building shall be damaged/altered, without prior approval from the competent authority through the Engineer-in-charge.
- (ii) Structural provisions like openings, cutouts, if any, provided by the department for the work, shall be used. Where these require modifications, or where fresh provisions are required to be made, such contingent works shall be carried out by the contractor at his cost.
- (iii) All such openings in floors provided by the Department shall be closed by the Contractor after installing the cables/ conduits/ rising Mains Etc. as the ease may be, by any suitable means as approved by The Engineer-in-charge without any extra payment.

1.10 WORK IN OCCUPIED BUILDINGS

- (i) When work is executed in occupied buildings, there should be Minimum of inconvenience to the occupants. The work shall be programmed in consultation with the Engineer-in-charge and the occupying department. If so required, the work may have to be done even before and after office hours.
- (ii) The contractor shall be responsible to abide by the regulations or restrictions set in regard to entry into, and movement within the premises.
- (iii) The contractor shall not tamper with any of the existing installations including their switching operations or connections there to without specific approval from the Engineer- in-charge.

1.11 BARRIER FREE REQUIREMENTS:

- 1. The cage dimension recommended for 13 passenger lift (884KG) by Bureau of Indian Standards

Clear internal depth: 1100 mm

Clear Internal Width: 2000 mm

Entrance door Width: 900 mm

- 2. A hand rail not less than 600mm long at 900mm above floor level shall be fixed adjacent to the control panel.
- 3. The time of an automatically closing door should be minimum 5 seconds and the closing speed should not exceed 0.25M/sec.

4. The interior of the cage shall be provided with a device that audibly indicates the floor the cage has reached.
5. Materials/ electrics used for the manufacturing of the lift is from reputed make.

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GENERAL CHECKLIST FOR JOINT INSPECTION OF LIFTS BY
FACT AND VENDOR REPRESENTATIVES

1. Place of Inspection:
2. Date of Inspection:
3. Name of the Firm:
4. Verify visually particulars as per agreement description and completeness of work to be executed as per contract.
5. Verify layout as per drawing and record discrepancies if any.
6. Whether plates with word LIFT and instruction to be displayed / provided on each landing and in lift car.
7. Lift with Equipment:
 - a) Depth of Pit and whether ladder provided.
 - b) Arrangement for lighting in the pit
 - c) Arrangement for lighting in the lift shaft
 - d) Whether adequate tie rods provided for counter weights
 - e) Whether all wiring has been in conduit pipes/troughs properly fixed and earthed.
 - f) Guard for counter weights in the pit.
 - g) Provision of check nuts and split pins in rope fastenings and terminations.
 - h) Whether rope tension equal for all ropes
 - i) Whether buffers symmetrically positioned.
 - j) Top car clearance
 - k) Bottom car clearance
 - l) Top Counter weight clearance
 - m) Bottom car run by.
 - n) Bottom counter weight run by.
 - o) Any other.
8. Machine room check provision for:
 - i) Arrangement for hand lamp with flexible cord
 - ii) A plug and socket
 - iii) Adequate Ventilation
 - iv) A danger plate on door
 - v) Trap door
 - vi) Main Switch
 - vii) Circuit diagram on wall
9. Earthing
Whether machine body controller, car frame, limit switches and conduits properly earthed & check earthing continuity.
10. Machine and controller
 - (i) Oil leakage if any
 - (ii) Abnormal temp rise of oil, bearing and motor
 - (iii) Abnormal noise or vibrations
 - (iv) Whether UP and DOWN (Direction arrows on motor or fly wheel marked)

- (v) Whether rubber pads provided under machine and its bed plates
- (vi) Whether control circuits have independent fuses
- (vii) Whether protection against breakage of rope or taps for rope selector provided.
- (viii) Whether cable ferrules marked
- (ix) Gap between the car and landing sill
- (x) Any other.

11. Operation:

- (i) Operation of all floor buttons from within the car in up and down direction on both attendant and auto control.
- (ii) Operation of car by calls given from landing buttons in up and down direction on both attendant and auto control.
- (iii) Operation of door close and door open buttons.
- (iv) Emergency alarm.
- (v) Emergency Stop
- (vi) Light and Fan
- (vii) Emergency Key opening
- (viii) Emergency Light
- (ix) Operation on type of control stipulated in contract
- (x) Operation of car top safety switches to make the lift inoperative from within the car and speed of operation.
- (xi) Door locking as checked from each floor
- (xii) Any abnormal noise vibration jerk interval and stopping
- (xiii) Sideway play if any in the car
- (xiv) Working of position and direction indicators in car and at each landing
- (xv) Functioning of sensitive reopening arrangements on moving edge of doors.
- (xvi) Smooth sliding movement of car and landing doors.
- (xvii) Whether car is stopped in between the floor and whether the doors can be opened manually from inside
- (xviii) Opening of landing or car door when lift is in operation to see that the movement of lift stops.
- (xix) Operation of fireman switch
- (xx) Check for brake release device and hand winding provisions.

12. Safety Devices:

- i) Functioning of protection for single phasing and phase reversal
 - ii) Function of protection for automatic power cut off device before the car and counterweight load on buffers.
 - iii) Function of over load relays
 - iv) Operation of Safety gear and also see for undue deformation of guide rails and stopping distance.
 - v) Check operation of safety switches.
 - vi) Operation of upper limit switch and positions
 - vii) Operation of lower limit switch and position
 - viii) Operation of electrical protection against opening of emergency door.
 - ix) Operation of ARD/ ERD.
 - x) Any other.
13. Checking of rope slip after 3 complete trips by putting a reference mark on the sheave and rope 60mm/12mm, 60mm/20mm.
14. Test to see that the lift does not start in upward direction on no load and down direction on full load (if applicable) and on single phasing.
15. Check application of brake on full load in down direction at full speed by switching off the power supply and for overheating.

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16. Load Test: Lift.

	No load		Full Load	
	Up	Down	Up	Down
Starting Current AC (Amp)				
Running Current AC (Amp)				
Travel (Meter)				
Speed (Meter/ Second)				

17. Submission of Other test Reports

- i) Size of the lift well
- ii) Internal depth of car platform
- iii) Size of car door
- iv) Rope protection against breakage have been carried out and test results are found
- v) Insulation resistance test & high voltage test have also been tested: I.R. is found M.Ohm (Requirement 0.5 M.Ohm minimum) and HV test with stood/not with stood.
- vi) Factor of safety provided for respective components shall be verified with respect to latest IS/Lift act and rules.
- vii) Compression of buffer springs should be minimum 250mm as per IS specifications.
- viii) Length of buffer spring and counterweight spring should not be less than stipulated values.

Safety in use of lifts has to be given the top priority. Therefore all the tests stipulated by IS specifications & Lift Acts & Rules should be done in a stringent manner. However, in case the conducting of test is not feasible, a certificate to that effect should be obtained from manufacturer or from the Lift Inspector

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GENERAL CONDITIONS FOR COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT

Scope of Maintenance:

The maintenance of passenger lifts as included in the schedule of work are to be carried out on comprehensive basis. **No material will be supplied by FACT except mentioned under Exclusions.** The firm has to adhere to maintenance schedule attached with this document.

METHODOLOGY

1. After the completion of guarantee period is over, the lift shall be healthy and free from defects condition.
2. At the start of each month, the lift supplier in consultation with engineer-in-charge concerned shall prepare a programme for preventive maintenance to be carried out during the month as per Annexure-III. The actual maintenance carried out shall be recorded in Annexure-IV at the end of each month OR lift supplier may submit detailed service reports(contain details in Annexure) for lift monthly.
3. The vendor shall depute only those persons who are trained in lifts.
4. Any minor repairing of damages, wear & tear of car body (interior) shall be in the scope of Supplier.
5. Maintenance of shaft light, LT power Panel installed in the Lift Machine room etc shall be in the scope of FACT.
6. Any accident or damage will be the responsibility of vendor and the FACT will not entertain any claim, compensation, penalty etc. on this account or on account of nonobservance of any other requirement of law relevant to his work.

TOOLS & PLANTS

All tools and plants required for carrying out various tasks relevant to maintenance have to be arranged by vendor at his own cost.

COMMERCIAL

1. Payments shall be made on quarterly basis after the completion of the quarter and execution of all periodic maintenances. It is compulsory to submit the copies of reports containing details of periodical maintenance done every month with the bill. This certificate has to be signed by the Engineer-in-charge OR lift supplier may submit service reports for lift duly signed by Engineer-in-charge

PENALTY CLAUSE

1. All breakdown calls/ complaints have to be attended by the vendor with utmost promptness. The lift shall not be out of service beyond **24hours**. Failure to do so shall attract a pro-rata penalty on the maintenance cost for the No. of days the Lift is not operating.
2. For repeated unsatisfactory performance during the contract period penalty up to 10% of the quarterly bill amount shall be imposed. Decision of FACT shall be final on this account.

3. In case of a major accident/loss on account of negligence on the part of the contractor, the contract shall be terminated and 10% of the AMC cost shall be recovered in addition to other provisions of the contract.

PERIOD OF CONTRACT

1. The period of contract shall be **36 months after 12 Months Warranty periods.**
2. FACT reserves the right to terminate whole or part of the contract by giving prior notice of one-month duration at any time during the period of the contract.

INCLUSIONS

The vendor will, repair or replace any parts detailed in the following section, which, are defective

- a) Renew all wire ropes and chains [where fitted] as often as required to maintain an adequate factor of safety, to equalize the tension on all hoisting ropes, repair or replace conductor cables and hoist way and machine room elevator wiring.
- b) Furnish lubricants compounded to original manufacturer's stringent specifications.
- c) Examine periodically all safety devices and governors and make all customary safety tests.
- d) Systematically examine and adjust the following components: Machine, Worm Gear, Thrust Bearings, Drive Sheave, Drive Sheave Bearings, Break Contact, Lining and components.
- e) Motor, Motor Windings, Rotating Elements, Bearings, Coils, Resistance for operating and Motor Circuits, Magnet Frames & other Mechanical parts.
- f) Controller, Selector, Leveling devices, Cams, relays, solid State Components eg. PCB's, Transducers, Resistors, Condensers, Power Amplifiers, Transformers, Contacts, Leads, Dashpots, Timing Devices, Steel Selector Tapes and Mech. & Electrical Driving equipment.
- g) Emergency light and batteries for emergency light.
- h) Governor, Governor Sheave, Shaft Assembly, Bearings, Contacts and Governor
- i) Jaws.
- j) Car and Hall Mechanical Buttons, Car and Hall position indicators, Car and Hall Lanterns, Car direction indicators and all other Car and Landing Signal Fixtures as installed by the original manufacturer.
- k) Deflector or Secondary sheave, bearings, car and counterweight guide and buffers, top and bottom limit switches, Governor Tensions Sheave Assembly, Compensating sheave Assembly, Car, Counterweight and Counterweight Guide shoes including Rollers or Gibbs. Interlocks on Hoist way Door, Hoist way Door Hangers, Guides, Automatic power operated door operator, Car Door Hanger, Car Door Contact, Safety shoe, Load weighing Equipment, Car Frame, Car Safety Mechanism and Platform. Emergency light & Alarm, Infrared device etc.



EXCLUSIONS:**Items not covered under the Scope of Comprehensive Maintenance Contract:**

Major repair on car cabin, door panels, hung ceilings, handrails, mirrors, floor coverings, carpets, other architectural features, hoist way enclosure, security systems, external wiring, to the elevator LT power supply cable & panel.

MISCELLANEOUS

- 1.The workers shall be provided with necessary Tools, Testing equipments and safety equipments.
- 2.The workers shall observe all the labour rules and regulations in force.
- 3.The lift supplier should have round the clock contact telephone number. In case of Emergency, their authorized supervisor shall be available at site on short notice and all efforts shall be made to normalize, at the earliest.
- 5.The lift supplier is responsible to keep necessary spares and consumables, for due performance of the contract.
- 6.The complaint register should be maintained as per the instructions of the Engineer-in-charge.
- 7.The AMC contract can be terminated by FACT with one month prior notice, if the performance is not satisfactory.



MAINTENANCE SCHEDULE

MONTHLY

1. Complete check up of operation and safe working of lift including cleaning, oiling, replacement of faulty part etc.,
2. Checking for any abnormal noise/vibration and take corrective action.

QUARTERLY

1. Checking and tightening of electrical connections.
2. Cleaning of internal parts of Lifts.

YEARLY

1. Complete servicing of the Lifts.
2. Check for any rust spots, Dry. Remove such rust spots & patch up with red oxide and paint.

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**Pre-Qualification Criteria for SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF PASSENGER
LIFT IN BAGGING PLANT, FACT-CD**

Pre-Qualification Criteria for Supply, Installation, Testing & Commissioning of Passenger Lift in Bagging Plant, FACT-CD		
PQC CL.	Conditions	Documents to be submitted
1	The bidder shall be the manufacturer of Passenger Lifts or their authorized dealer/ distributor/ channel partner.	Self-declaration by the manufacturer with details of manufacturing facility and contact number. OR In the case of dealer/ distributor/ channel partner, tender specific authorization letter from the manufacturer to certify the competency of the vendor to quote on their behalf shall be submitted along with details of manufacturing facility of OEM and contact number.
2	The bidder or manufacturer shall be in the business of supply and installation of passenger lifts for more than 5 years, as on the date of enquiry.	Copies of relevant purchase order copies/ other documents to prove this
3	The bidder should have experience of having successfully carried out the supply, installation, testing, commissioning and AMC of passenger lifts in India with a capacity of 10 persons or higher during 7 years, as on the date of enquiry.	Copies of relevant purchase order/ work order and proof of successful commissioning/ completion of erection and AMC work such as Commissioning Report, Completion Certificate, etc. issued/ countersigned by the customer
4	The bidder shall maintain their office and technical support team in Ernakulam District of Kerala State to undertake breakdown/ preventive maintenance as part of Annual Maintenance Contract.	The address of local office with contact number shall be submitted.
5	Experience of having successfully completed the supply and installation of passenger lift during the last 7 years, as on the date of enquiry which shall be either of the following. a) 3 completed works with value not less than Rs. 9,04,000 each b) 2 completed works with value not less than Rs. 11,30,000 each c) 1 completed work with value not less than Rs. 18,08,000	Copies of relevant purchase order/ work order and proof of successful commissioning such as Commissioning Report, Completion Certificate, etc. issued/ countersigned by the customer
6	a) Average annual turnover of the bidder for the last three financial years ending on 31-03-2023 shall be at least Rs. 45/- Lakhs or above and b) Annual turnover for each year shall be at least Rs.7 /- lakhs or above during the last three financial years ending on 31-03-2023	Self-attested copies of audited financial statements (Profit & Loss Account and Balance Sheet) for the last three financial years ending on 31-03-2023

1. FACT shall have the liberty to verify the data submitted by the contractor by inspecting the workshop and contacting with their various customers.
2. Only technically and commercially prequalified bidders shall be considered for price bid opening and further evaluation.
3. Copies of all the above documents shall be duly attested by the bidder.

COMPLIANCE STATEMENT

Sl. No.	Terms	Bidder confirmation
1	Offer shall be as per the TPS CD-BP-LIFT-TPS.	
2	Pre Qualification Criteria is provided and only Pre Qualified Bids shall be considered for Technical Evaluation.	
3	Installation shall be carried out as per the conditions stipulated in the Technical Procurement Specification No. CD-BP-LIFT-TPS attached along with the Purchase Order for 13 Passenger Lift.	
4	CAMC shall be carried out as per the conditions stipulated in the Technical Procurement Specification No. CD-BP-LIFT-TPS attached along with the Purchase Order for 13 Passenger Lift.	
5	Delivery Period – As per TPS & Special Conditions provided.	
6	Please confirm : Price Basis – FOR FACT Stores (as per Gem T & C)	
7	Please confirm : Taxes and Duties - The Price offered in GEM is all inclusive of TAX. (as per Gem T & C)	
8	<p>Please confirm :</p> <p>Payment Terms : a) Supply: - 80% of supply value (limited to 70% of total value of supply + I&C) together with 100% duties and taxes shall be paid within 30 days after receipt and acceptances of items at our site. Balance will be paid after successful installation & commissioning and submission of performance bank guarantee @ 10% of total basic order value for a period of 12 months from date of successful commissioning.</p> <p>b) Installation & Commissioning: 100% shall be paid after successful commissioning and against submission of above PBG.</p> <p>c) CAMC-On quarterly Basis after the completion of quarter and execution of all periodic maintenances.</p>	
9	<p>Please confirm :</p> <p>Liquidated Damages: As per GeM – “@ 0.5% of the contract value of delayed quantity per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value of delayed quantity without any controversy/dispute of any sort whatsoever”(as per GeM T & C)</p>	

Note : All the above columns shall be filled properly, without leaving blanks. Please upload / return this document duly filled-in, along with your bid.