



भारतीय विमानपत्तन प्राधिकरण

AIRPORTS AUTHORITY OF INDIA

कलिकट अंतर्राष्ट्रीय विमानपत्तन / CALICUT INTERNATIONAL AIRPORT

कलिकट विमानपत्तन (पी.ओ.), केरल / Calicut Airport (P.O.), Kerala - 673 647

☎ टेलीफोन : 0483 2719475, फैक्स : 0483 2711406, ई-मेल : dgmelect_calicut@aaiaero

By Regd.AD/E-mail

Ref. No. AAI/CL/ENGG(E)/121/WO-11/119

Date: 23.08.2021

**M/s Volks Energie Pvt.Ltd.,
306-Bakshi House,
40-41 Nehru Place,
New Delhi - 110019**

**Name of Work : Internal Modification Work of ITB/DTB First Floor at
Calicut International Airport.
SH: Air-conditioning and related Works**

Ref: : Your financial bid opened on 17.08.2021

Dear Sir(s),

1. Your e-tender for the work mentioned above is hereby accepted on behalf of the Chairman, Airports Authority of India at the item rates quoted by you totaling to **Rs. 29,78,540/- (Rupees Twenty Nine Lakhs Seventy Eight Thousand Five Hundred and Forty Only)** excluding GST as applicable.
2. Jt. Gen. Manager (Engg-Elect), AAI, Calicut International Airport shall be the Engineer-in-Charge of the work. You are requested to attend the office of Jt. Gen. Manager (Engg-Elect), AAI, Calicut International Airport by **06.09.2021** to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value **Rs.200/- (Rupees Two Hundred Only)** and the cost of the stamp paper shall be borne by you.
3. ~~The earnest money amount of NIL received along with your tender will be refunded.~~ Please deposit **Rs.2,97,854/- (Rupees Two Lakhs Ninety Seven Thousand Eight Hundred and Fifty Four Only)** towards security deposit within 10 days from the date of issue of this letter failing which, the same will be deducted as per condition of Clause No.1 A at page No.GCC14 of contract document
4. Within 30 days of issue of acceptance letter, you shall submit to AAI, a Performance Guarantee as per condition of clauseon page.....for an amount of **Rs. (Rupees.....Only)** in the form of Bank Guarantee on the Proforma appended at Annexure ...onof Contract Document (If it is applicable).



QMS 9001:2015 EMS 14001:2015 CERTIFIED

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कलिकट विमानपत्तन(पी.ओ.) केरल / Calicut Airport (P.O.), Kerala - 673 647

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5. You are requested to comply with the provisions of Contract Labour (Regulation and Abolition) Act of 1970 and Contract Labour (Regulation and Abolition) Central Rules 1971 Child Labour (Prohibition & Regulation) Act 1986, Construction of Works (Regulation of Employment and Condition of Services) Act 1996, Building and other construction Workers Welfare Cess Act 1996 as specified in Clause 37 on Page No.64 & 86 of GCC of tender and rules of Central and State Government.
6. You are also directed to contact Manager (Engg-Elect)- I, AAI, Calicut International Airport immediately who will arrange to hand over the site.
7. Please note that the time allowed for carrying out the work shall be **03 (Three) Months** and same shall be reckoned from the 10th day of issue of this letter.
8. Any further correspondence in connection with the contract should normally be addressed to the Engineer- In- Charge.
9. Please note that the awarded rate is exclusive of GST and you are required to submit valid GST invoices for effecting payment.
10. Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after signing it to the undersigned as a token of acceptance.

Thanking you,

Encl: SOQ

Yours faithfully,

Pudh 23/08/2021

Asst. General Manager (Engg-Elect) -II
For and on behalf of the Chairman
Airports Authority of India

सहायक महा प्रबंधक (इंजी-विद्युत)

Asst. General Manager(Engg-E)

भा.वि.प्रा. कलिकट अंतर्राष्ट्रीय विमानपत्तन
A A I Calicut International Airport

Item Rate BoQ

Name of Work: Internal Modification Work of ITB / DTB First Floor at Calicut International Airport, SH : Airconditioning and related Works
Ref No: AAU/CL/Engg(E)/NIT -08/21-22/

Name of the Bidder/ Bidding Firm / Company :		PRICE SCHEDULE						
Vols Energie pvt Ltd		NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #
		Sl. No.	Item Description	Quantity	Units	RATE Excluding GST In Figures To be entered by the Bidder Rs. p	TOTAL AMOUNT WITHOUT GST	TOTAL AMOUNT In Words
1		1	Supplying, installing, testing and commissioning of double skin construction AIR HANDLING UNIT of 14000CFM made of 25mm thick panels consisting of pre plasticized G.I. casing of thickness 0.8mm outside layer and 0.8 mm inside layer with polyurethane foam (PUF) insulation factory injected between them by injection moulding machine. AHUs shall be provided with Lockable push button OFF near AHU.	3	4	5	8	10
			a. Supply air centrifugal Backward / forward curved fan for all AHU's with efficiency >75% suitable for static pressure of not less than 40mmwg and Fan outlet velocity not exceeding 10 mps. b. VFD shall be designed for dedicated HVAC applications for supply air fan with built-in PID controller, control panel (keypad & display), suitable IP enclosure for use on standard. Each VFD panel to be provided with digital display showing electrical parameters like voltage, current, power consumption and shall be independent mounting type. The VFD should have following I/O points AI- 5, AO- 4, DI- 6, DO -2, Vendor configure & programme VFD based on above points. Each VFD Panel shall be provided with a suitable capacity incomer 4 pole MCCB & Terminals for cable Termination etc as required. This starter Panel shall be provided with 2 nos 16 A DP MCB & 1No. 32 - 50 A TPN MCB for VFD etc complete as required for functioning of VFD for AHU. c. Pre filter (MERV 8 - filter section with 50mm thick metal viscous/ washable synthetic type air prefilters) in supply air stream. d. Cooling coil section with aluminium finned copper tubes (tubes thickness not less than 0.5mm), cooling coil of 6 row deep. e. Squirrel cage induction motors suitable for 415 ± 10% volts, 50 Hz, AC supply & high efficiency IE3. f. Fan belt drive package with suitable belt and pulleys g. Vibration isolators. h. Mixing Chamber with return air and fresh air dampers of suitable capacity. i. AHU shall be provided with SS-304 end plates for coil, 150 mm dia. dial type pressure gauges (2 nos.) and industrial type thermometers (2 nos.) at the inlet and outlet of coil, auto purge valve wherever required	1	Job	6,50,000.00	6,50,000.00	INR Six Lakh Fifty Thousand Only

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	NUMBER #	TEXT #
SL No.	Item Description	Quantity	Units	RATE Excluding GST In Figures To be entered by the Bidder Rs. p	TOTAL AMOUNT WITHOUT GST	TOTAL AMOUNT In Words	TEXT #
1	2	3	4	5	8	10	
2	Supplying, installing, testing and commissioning of horizontal FAN COIL UNITS, blow through type, each complete with 3 rows deep chilled water coil, one or more 3 speed centrifugal fans, cleanable metallic filters, main condensate drain pans, casing, coil piping connections, through 6% volts, 50 cycles, single phase power supply. Fan Coil Units shall be of 3TR and 1200CFM refrigeration capacities	6	Job	40,000.00	2,40,000.00	INR Two Lakh Forty Thousand Only	
3	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with fire retardant quality expanded polystyrene moulded pipe section of density 20 kg/cu.m after a thick coat of cold setting adhesive (CPRX compound) wrapping with 500g polythene faced hessain and finally applying 0.63mm aluminium sheet cladding complete with type 3, grade 1 roofing feltstrip (as per IS:1322 as amended up to date) at joints repairing of damage to building etc. as per specifications and as required complete in all respect.	150	Meter	1,900.00	2,85,000.00	INR Two Lakh Eighty Five Thousand Only	
4	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with fire retardant quality expanded polystyrene moulded pipe section of density 20 kg/cu.m after a thick coat of cold setting adhesive (CPRX compound) wrapping with 500g polythene faced hessain and finally applying 0.63mm aluminium sheet cladding complete with type 3, grade 1 roofing feltstrip (as per IS:1322 as amended up to date) at joints repairing of damage to building etc. as per specifications and as required complete in all respect.	40	Meter	800.00	32,000.00	INR Thirty Two Thousand Only	
5	Supplying, fixing, testing and commissioning of following valves, strainers, gauges in the chilled water piping duly insulated to the same specifications as the connected piping and adequately supported as per specifications. BUTTERFLY VALVE (MANUAL) with C I body SS Disc, Nitrile Rubber Seal & O- Ring PN 16 pressure rating for chilled water circulation as specified 100mm dia	8	Each	4,000.00	32,000.00	INR Thirty Two Thousand Only	
6	Supplying, fixing, testing and commissioning of following valves, strainers, gauges in the chilled water piping duly insulated to the same specifications as the connected piping and adequately supported as per specifications. BUTTERFLY VALVE (MANUAL) with C I body SS Disc, Nitrile Rubber Seal & O- Ring PN 16 pressure rating for chilled water circulation as specified 40mm dia	12	Job	2,000.00	24,000.00	INR Twenty Four Thousand Only	
7	Y - STRAINER of Ductile CI Body flanged ends with stainless steel strainer for chilled / hot water circulation including insulation as specified 100 mm dia	2	Each	6,000.00	12,000.00	INR Twelve Thousand Only	

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	RATE Excluding GST In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT WITHOUT GST	TOTAL AMOUNT In Words	TEXT #
1	Supply, installation, testing and commissioning of TWO WAY PRESSURE INDEPENDENT DYNAMIC BALANCING CUM CONTROL VALVE suitable for 100mm dia pipelines provided with spring return function & fitted with modulating actuators in chilled water lines at air handling unit. The actuator shall have required shut off capability of minimum 4 bar rating. The valves & actuators for AHU's shall be provided with thermostat for measuring the return air temperature and operating the actuator as an independent system. Further the valve shall also be compatible with Building Automation System (Siemens Desigo CC)	3	4	5	8	10	
8		1	Each	90,000.00	90,000.00	INR Ninety Thousand Only	
9	Supply and laying of 40 mm PVC pipe for drain line with required supports etc complete as required	20	Meter	295.00	5,900.00	INR Five Thousand Nine Hundred Only	
10	Supplying, laying, fixing, testing and commissioning of 19mm thick closed cell elastometric nitrile rubber of class 'O' applied by suitable adhesive, as per specifications and as required complete in all respect	5	Sqm	690.00	3,450.00	INR Three Thousand Four Hundred & Fifty Only	
11	Supply, installation, balancing and commissioning of fabricated at site GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications of following sheet thickness complete as required. a) Thickness 1.00 mm sheet	20	Sqm	1,092.00	21,840.00	INR Twenty One Thousand Eight Hundred & Forty Only	
12	Supply, installation, balancing and commissioning of fabricated at site GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications of following sheet thickness complete as required. b) Thickness 0.80 mm sheet	300	Sqm	943.00	2,82,900.00	INR Two Lakh Eighty Two Thousand Nine Hundred Only	
13	Supply, installation, balancing and commissioning of fabricated at site GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications of following sheet thickness complete as required. c) Thickness 0.63 mm sheet	80	Sqm	795.00	63,600.00	INR Sixty Three Thousand Six Hundred Only	
14	Supplying and fixing of 25mm thickness duly laminated aluminum foil of mat finish closed cell Nitrile rubber (Class "O") insulation on existing duct after applying suitable adhesive for Nitrile rubber. The joints shall be sealed with 50 mm wide and 3mm thick self adhesive nitrile rubber tape insulation complete as per specifications and as required.	400	Sqm	1,210.00	4,84,000.00	INR Four Lakh Eighty Four Thousand Only	

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	RATE Excluding GST In Figures To be entered by the Bidder Rs. p	TOTAL AMOUNT WITHOUT GST	TOTAL AMOUNT In Words	TEXT #
1	2	3	4	5	8	10	
15	Supply and laying of 10 mm closed cell nitrile rubber acoustic insulation	320	Sqm	6000.00	1,92,000.00	INR One Lakh Ninety Two Thousand Only	
16	Supply and fixing of canvas connections	1	Each	10,000.00	10,000.00	INR Ten Thousand Only	
17	Supplying & fixing of powder coated extruded aluminium Supply Air Grills with aluminium volume control dampers as per specifications.	10	Sqm	4,000.00	40,000.00	INR Forty Thousand Only	
18	Supplying & fixing of powder coated extruded aluminium Return Air Grills with louvers but without volume control dampers complete as required.	10	Sqm	3,000.00	30,000.00	INR Thirty Thousand Only	
19	Supply, installation, testing and commissioning of GI volume control duct damper complete with neoprene rubber gaskets, nuts, bolts, screws linkages, flanges etc, as per specifications.	10	Sqm	4,000.00	40,000.00	INR Forty Thousand Only	
20	Supplying, Fixing, testing and commissioning of fire dampers in supply air duct/main branch and return air path as and where required of required sizes i/c control wiring, the damper shall be motorized and spring return so as to close the damper in the event of power failure automatically and open the same in case of power being restored. The spring return action shall be inbuilt mechanism and not externally mounted. The damper shall also be closed in the event of fire signal complete as required and as per specifications a) Fire damper	2	Sqm	5,000.00	10,000.00	INR Ten Thousand Only	
21	Supplying, Fixing, testing and commissioning of fire dampers in supply air duct/main branch and return air path as and where required of required sizes i/c control wiring, the damper shall be motorized and spring return so as to close the damper in the event of power failure automatically and open the same in case of power being restored. The spring return action shall be inbuilt mechanism and not externally mounted. The damper shall also be closed in the event of fire signal complete as required and as per specifications. b) Actuator	1	Each	8,500.00	8,500.00	INR Eight Thousand Five Hundred Only	
22	SITC of UVGI lamps suitable for continuous operation having UV-C band having wave length of 254+/-1nm and irradiation intensity of average 4016microwatts/sq cm for germicidal irradiation of the entire AHU cooling coil face area along with all supporting structures, power and control panel, cabling, earthing, safety provisions etc as per the detailed technical specifications for AHU details specified here under complete as required 14000 CFM	1	Job	1,25,000.00	1,25,000.00	INR One Lakh Twenty Five Thousand Only	

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
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1	2	3	4	5	8	10
23	Supply, Installation, Testing and Commissioning of Stand alone Intelligent 32 bit Microprocessor DDC Controllers (PXC12 D or equivalent) as per the specifications for IO points. The above shall be housed in a vandal proof, lockable & secure MS powder coated Cabinets to be supplied along with the Controllers	1	Job	46,000.00	46,000.00	INR Forty Six Thousand Only
24	Integration of the DDC controller including sensors into the existing BMS system (Make : Siemens Model : Desigo CC)	1	Job	70,000.00	70,000.00	INR Seventy Thousand Only
25	Supply, Installation, Testing and Commissioning of Differential pressure switches across the blowers for indicating blower status. Pressure differential - 10mmWG - 125 mmWG. The switch shall be with connecting tube and metal bends for connections to the duct. The housing shall be IP 54 rated. The contact shall be SPDT type with 230 VAC, 1 A rating	1	Job	1,950.00	1,950.00	INR One Thousand Nine Hundred & Fifty Only
26	Supply, Installation, Testing and Commissioning of Differential pressure switches across the Air Handling Unit filters, for indicating the filter status. Pressure differential - 2 mmWG to 15 mm WG. The switch shall be with connecting tube and metal bends for connections to the duct. The housing shall be IP 54 rated. The contact shall be SPDT type with 230 VAC, 1 A rating as per specification.	1	Job	1,950.00	1,950.00	INR One Thousand Nine Hundred & Fifty Only
27	Supply, Installation, Testing and Commissioning of Duct Temperature Sensor shall be with rigid stem and of averaging type. These shall be suitable for duct installation (Range - 0-100o F) and accuracy shall be ± 0.36 degrees F.	1	Job	2,450.00	2,450.00	INR Two Thousand Four Hundred & Fifty Only
28	SITC of 2.0 Ton split type 5 star AC (EER 3.35 min) consisting of single room unit (evaporator unit) comprising copper coil with cordless remote control, suitable stabilizer unit and one number outdoor condensing unit comprising of sealed suitable type compressor and Copper coil condenser suitable for operation on 230V, 50Hz. AC supply and non CFC refrigerant like R-410A or equivalent capable of performing (a) cooling (b) de-humidifying (c) Air-Circulating (d) filtering including fixing the outdoor condenser unit on a raised suitable pedestals duly painted/Metal Stand as per site requirement (Pedestals/Metal Stand included in the scope) and fixing of Evaporator unit including providing and making inter connections between evaporator unit and condensing unit up to a length of 5 mtrs comprising of the following including first charge of refrigerant, complete as required. a) Suitable drain pipe of PVC or as per OEM specification for length upto 10 Metre b) Suitable insulated copper pipe for liquid line or as per OEM specification for length upto 5 Metre c) Suitable copper pipe for suction or as per OEM specification for length upto 5 Metre d) Suitable FR insulated, PVC sheathed unarmoured multi strand copper cable or as per OEM specification for length upto 5 Metre e) Supply and Fixing of Heavy duty Rigid type PVC pipe / PVC Trunking of suitable size for covering in the liquid line, suction line and multi strand copper cable or as per OEM specification for length upto 5 Metre	3	Each	50,000.00	1,50,000.00	INR One Lakh Fifty Thousand Only

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1	2	3	4	5	8	10
29	Supply and fixing of following for interconnections between evaporator unit and condensing unit mentioned in item No 28 (extra length if required) complete as required a) Suitable drain pipe for heavy duty PVC pipe or as per OEM specification for the item No 28 b) Suitable insulated copper pipe for liquid line or as per OEM specification for the item No 28 c) Suitable insulated copper pipe for suction or as per OEM specification for the item No 28 d) Suitable FR insulated, PVC sheathed unarmored multi strand copper cable or as per OEM specification for the item No 28 e) Supply and Fixing of Heavy duty Rigid type PVC Pipe/Plastic Trunking of suitable size for covering in the refrigerant drain line, liquid line, suction line and multi strand copper cable as required for the item No 28	30	Meter	800.00	24,000.00	INR Twenty Four Thousand Only
Total in Figures					29,78,540.00	INR Twenty Nine Lakh Seventy Eight Thousand Five Hundred & Forty Only
Quoted Rate in Words						

Dudh
23/08/2021

आचार्य मती प्रबोधक (इंजीनियरिंग)
Asst. General Manager(Engg-E)
ए. वि. म. कॉलेज अंतराष्ट्रीय विमानतल
A. A. I Calicut International Airport