

ITEM SPECIFICATION:

Sr. No	Particulars	:	Specification Parameter
1.	ITEM DESCRIPTION	:	WATER CHILLER CAPACITY: 45000 KCAL/HR, 15 TR MODEL: ADVANCE, SNOWCOOL, RITTAL OR SUBSTANTIALLY EQUIVALENT REFRIGERANT: - R404A, R407C, R134A OR ECO FRIENDLY AS PER TECHNICAL SPECIFICATION ANNEXURE "A".
2.	Offer Validity	:	180 Days from Bid Submission End Date
3.	Delivery Period	:	90 Days from the Date of Issue of the Contract
4.	Inspection	:	Post Dispatched inspection at OFV Premises.
5.	FOR	:	O. F. Varangaon
6.	Remark	:	<ul style="list-style-type: none"> 1. Firm to supply strictly as per OFV Item Specification. 2. Firm must submit technical leaflet of complete system as per OFV specification while submitting tender. 3. Test certificate & performance report is mandatory along with store.

NOTE: Participant/bidder must be submit the OFV/Buyer technical specification as mention above with firms authorized stamp and sign while bidding.

FIRM NAME: (.....) **Manglam Techno Air Equipments Pvt. Ltd** (.....)

(.....)

Sign & Stamp

ANNEXURE-A		
Technical Specification for water chiller		
1	Cooling capacity	45000 Kcal /hr or 15 TR
2	Make	Advance/Snowcool or Substantially Equivalent.
3	Model	WC 45000 or Substantially Equivalent.
4	No . Of Refrigeration Circuit	3 (Each of 5TR capacity)
5	Refrigerant	R404a/R 407c /R134a or ECO Friendly.
6	Operating ambient temperature	10 - 50 DEG C
7	Required water Temperature	8 - 10 DEG C
8	Preferred media	DM Water
9	Tank capacity	500 ltrs
10	Pump flow rate and pressure	150 LPM /4 BAR
11	In-Out water connector with ball valve	1-1 /4" BSF
12	Power supply	3ph, 415V (+6% to - 9%) , 50 hz and Earthing
13	Safety Interlocks	Low and high temp alarm Water level low trip Single phase preventer trip potential free contact for machine interlock Fan motor over load trip High pressure trip (HP Cut-Off) Low pressure Trip (LP Cut-Off) Anti freeze Thermostat trip water pressure switch Flow Switch
14	STANDARD SCOPE OF SUPPLY	
14.1	REFRIGERATION SYSTEM	
i)	Scroll Refrigeration compressor	EMERSON /DANFOSS MAKE or Substantially Equivalent.
ii)	Evaporator	Bare Copper Tube Type
iii)	Condenser FAN Heavy duty axial flow	Siemens /ABB make or Substantially Equivalent.
iv)	Thermostatic expansion valve , Drier,Thermostat and their refrigeration accessories	DANFOSS/ SPRALON make or Substantially Equivalent.
v)	Pressure Guage for HP & LP Refrigerant	Fiebig/Wike or Substantially Equivalent.
vi)	Temp. controller	Dixel/carel/Advance/Sub Zero make or Substantially Equivalent.

vii)	Air cooled condenser with internally grooved copper tubing. Extra large sized condenser coil and Air filters for operation in High Ambient up till 50 Degree C. temp.
14.2	WATER CIRCULATING SYSTEM
i)	SS-304 Centrifugal multistage pump Make : Grundfos or Substantially Equivalent. Bypass valve in between pump discharge pipe & suction pipe.
ii)	SS- 304 non corrosive water tank with TIG welded joints duly insulated to avoid thermal loss
iii)	Drain port with ball valve
iv)	Top up port
v)	Overflow port
vi)	Pressure gauge and level indicator
vii)	Thermometer on IN & OUT pipe
14.3	STRUCTURE (ENCLOSURE)
i)	Heavy duty MS square tubular frame ,piller construction , CRCA panels.
ii)	Heavy duty welded base frame and powder coated to std color .
iii)	Removable synthetic or metallic air filters for protect of Condenser from dust clogging .
iv)	IP 55 protected cabinet.
14.4	GENERAL CONDITIONS
i)	Commissioning and Performance trial of 3 days will be done at OFV premises in presence of firms representative without any extra cost.
ii)	Firm shall submit the Guarantee / warranty certificate of fan motor , refrigeration compressor & pump.
iii)	Firm will submit the self inspection certificate of material , equipment, assemblies etc.
iv)	The WATER CHILLER shall stand rejected if the water chiller fails to meet the requirement as mentioned in technical specification and other requirement of this specification and contract. Cost to be borne by contractor for to & fro freight.
v)	In the event a store is given back to the firm for rectification of defects, the firm will insure that the defects are attend to immediately without loss of time so that the store can be re-inspected. However it should be noted that the firm will not be entitled to dispose off that stores which is given for rectification but not reject without prior permission of the inspector. To & fro frieght of the store to be rectified shall be borne by the contractor.
vi)	Delivery Period - 90 days .
vii)	Payment will be done after successful completion of Comissioning and Performance trial and acceptance through JCC.

DO/ME

HOS/ME

JWM/ME

For Manglam Techno Air Equipments Pvt. Ltd.

Ratna Gupta
Director