



GE/276/21-22/QTN

Date - 14/12/21-22

QUOTATION

To,
MR. SUNIL LAWAD
PARTHAKANHA FARMER PRODUCING CO.LTD
AKLUJ
Email- sslawand@gmail.com
Mobile - 9922079000

Subject - Offer for frozen fresh sweet corn kernel process line and blast and cold storage

Dear Sir,

As Per Your Requirement, we are submitting herewith our lowest & competitive Techno-commercial offer for the supply of following Machineries / Equipment's.

Sr. No	Description	Qty	Rate	Amount
A	AUTOMATIC SWEET CORN KERNEL PROCESS LINE CAPACITY - 1000 KG PER HRS			
01	FEEDING BELT ELEVATOR	01	275000	275000
02	TWO STAGE FLOAT WAHSER	01	825000	825000
03	VIBRATOR CUM GRADER	01	375000	375000
04	LINEAR CONTINEOUS TYPE BLANCHER	01	875000	875000
05	LINEAR CONTINEOUS TYPE COOLER	01	675000	675000
06	FEEDING BELT ELEVATOR	01	275000	275000
07	VIBRATOR CUM GRADER	01	375000	375000
08	SHORTING BELT CONVEYOR	01	185000	185000
09	ELCTRICAL CONTROL PANEL -ONLY	01	150000	150000
10	WOOD FIRED BOILER -1000 KG	01	1500000	1500000
11	STEAM PIPELINE , FITINGS AND INSULATION	01	150000	150000
12	WET PULVERIZER	01	225000	225000
B	<u>supply and installation of puff insulated panels, floor insulation. Doors and refrigeration</u> <u>- cold storage -200 MT and blast freezer -5 MT for fresh sweet corn kernel process line</u>			
12	COLD STORAGE -200 MT -ON AMMONIA GAS BASED BLAST FREEZER -5MT -ON AMMONIA BASED ANTE ROOM FOR PACKING	01 SET	11500000	11500000
13	COOLING TOWER 200MT	01	295000	295000
14	COOLING TOWER PIPELINE,PUMP AND FITTING	01	175000	175000
15	ELECTRICAL CABLE FOR ALL MACHINERY FROM MAIN PANEL TO ALL MACHINES	01	400000	400000

16	CABLE TRAY AND MOUNTING MS BRACKETS	01	200000	200000
17	WATER SUPPLY PIPELINE FROM MAIN TANK TO ALL MACHINE	01	200000	200000
18	TRANSFORMER	01	369000	369000
19	MAIN CONTROL PANEL	01	600000	600000
20	WEIGHING SCALE -40MT	01	800000	800000
			Subtotal	20424000
			GST - 18% - EXTRA	3676320
			Subtotal	24100320

ERECTION, COMMISSIONING AND TRIAL – TA, DA on client scope and 6% Extra

TECHNICAL SPECIFICATIONS -

1. FEEDING BELT ELEVATOR -

- MOC- SS 304
- Capacity -1000kg per hrs
- Overall Size – 800mm W x 4000mm x 2700mm H
- Belt in poly propylene modular belt
- Belt width -600mm
- Cleat height -50mm and pitch of cleat -250mm
- Height of elevator is suitable to next machine
- Collection tray 1.2 mm thick.
- Conveyor belt 600 mm width, pp makes.
- Extraction belt in plastic modular with zero perforations.
- Feed hopper & discharge chute.
- Installed power 1.0 HP.

2. TWO STAGE FLOAT TYPE WASHERS WITH GRADER

- MOC -SS 304
- Capacity -1000kg per hrs.
- Size of washer -1250mm width x 5500mm length x2000mm height
- Washing in 2- stage and water spray with bubbling in 3- stage
- SS 304 conical tanks are provided – 2nos
- First conical tank in three stage
- First and second stage - water spray nozzles for washing of kernels
- Second nozzle with header for washing of product
- Third nozzle with header for push the product to next conical tank
- One over flow connection is provided for removing of foreign material
- One drain connection is provided
- Two overflow circulation collection tanks are provided
- Each circulation collection tank capacity -600 lits
- Conical tank size – 1200mmLx800mmWx600mmH and cap-600lits – 2NOS
- Nozzles means directly holes 3mm and 5mm provided
- Two tanks perforated tray is provided as a filter 3mm
- At final stage one de watering vibrator is provided
- De watering from kernels and 5mm above kernels goes to next step
- And below 2mm to 5mm collection through one perforated tray
- System is mounted on sturdy SS frame
- One 05 HP – 2NOS pump is provided for re circulation of water-Kirloskar make

3. DEWATERING VIBRATOR –

- Supply & manufacturing of vibrator
- MOC – SS 304
- Size –600mm x 1800mm x 1000mm Ht
- Vibratory feeders consist of an open or closed frame tray mounted on a vibratory drive and a material hopper that sits above the tray. The drive vibrates the tray to cause the movement of material into the process. Vibratory feeders provide accurate and reliable feeding of vegetables to the next equipment
- Capsule type mesh is provided on top
- Rosta make oscillating springs are provided – 4nos
- Spring – imported from Italy
- Vibrating motor – italvibrus / oli made in Italy
- Vibrating motor -0.5HP – 02 no's
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4. SS 304 LINEAR CONTINOUS TYPE BLANCHER –

- MOC-SS 304
- BELT material – SS 304 wire mesh type belt
- SS Wire mesh belt opening is suitable for sweet corn kernels
- Overall size – 1000mmx5000mmx1250mm
- Size – 900mm x 4500mm x1250mm for discharge height of cooler
- A rectangular section tank of size: widths 750 mm X 3500 mm,
- The drive for the conveyor is through speed geared motor. The speed of the conveyor belt is maintained by VFD
- Belt speed is control by VFD and holding time from 2 minute to 7 minutes
- Steam header is provided below the belt
- One steam inlet connection with header is provided and temperature is maintained by solenoid valve is around 90 to 95 deg
- One temperature gauge is provided
- Installation power: 07HP.
- Hot water circulation pump- 5HP-2nos – one is stand by
- and gear box and motor - 02 HP for conveyor
- Automatic Digital temperature controller system
- Closed filtration system with easy cleaning of filters – 2nos

5. LINEAR CONTINEOUS TYPE COOLER –

- Two rectangular section tanks are provided, one for normal water recirculation
- Size –750mm x4000mm L and 1200mm H
- PP modular belt is provided with 10 sprockets
- 27% opening belt is provided
- The drive for the conveyor is through speed geared motor. The speed of the conveyor belt is maintained by VFD
- Belt speed is control by VFD from 500mm to 2000mtrs per minute
- One water inlet connection, one overflow connection and drain connection is provided for fresh water circulation and
- Normal and chilled water spray nozzles are provided on top of the belt
- water circulating pump is 03 HP

- Conveyor gear box and motor -02HP
- Installation power: 05 HP.

6. FEEDING BELT ELEVATOR -

- MOC- SS 304
- Capacity -1000kg per hrs
- Overall Size - 800mm W x 4000mm x 2700mm H
- Belt in PVC / poly propylene modular belt
- Belt width -600mm
- Height of elevator is suitable to next machine
- Collection tray 1.2 mm thick.
- Conveyor belt 600 mm width, pp makes.
- Extraction belt in plastic modular with zero perforations.
- Feed hopper & discharge chute.
- Installed power 1.0 HP.

7. DEWATERING VIBRATOR -

- Supply & manufacturing of vibrator
- MOC - SS 304
- Size -600mm x 1800mm x 1000mm Ht
- Vibratory feeders consist of an open or closed frame tray mounted on a vibratory drive and a material hopper that sits above the tray. The drive vibrates the tray to cause the movement of material into the process. Vibratory feeders provide accurate and reliable feeding of vegetables to the next equipment
- Capsule type mesh is provided on top
- Rosta make oscillating springs are provided - 4nos
- Spring - imported from Italy
- Vibrating motor - italvibrus / oli made in Italy
- Vibrating motor -0.5HP - 02 no's

8. INSPECTION BELT CONVEYOR -

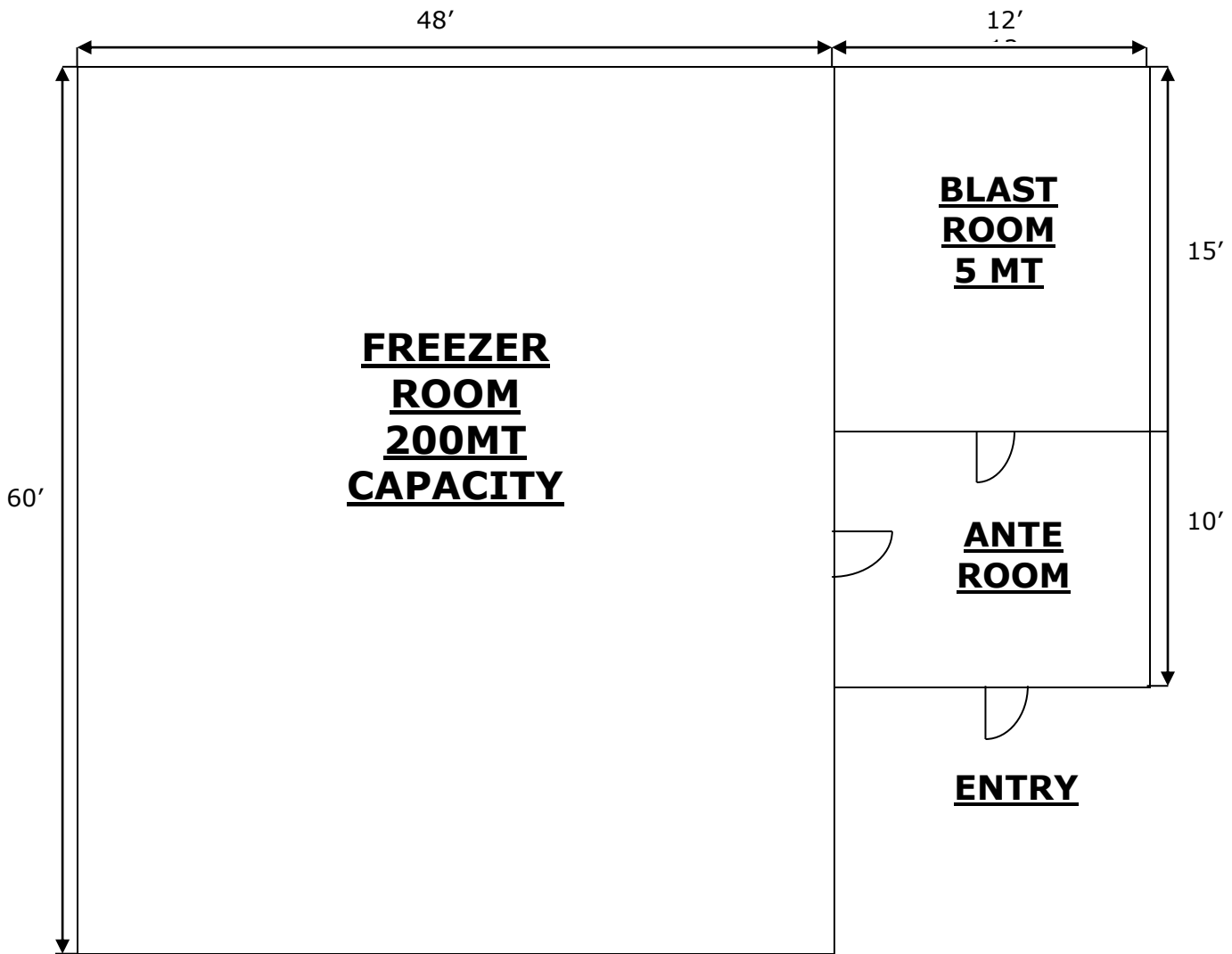
- MOC - SS 304
- Capacity - 1000kg per hrs.
- Overall size - 800mmWx 3500mm L x 1000mm H
- Supply & manufacturing of pvc type belt.
- SS 304 frame and mounting belt arrangement
- Width of the belts is 750 mm.
- Overall width is 800mm
- Feeding height is around 750mm from ground.
- One feeding hopper and discharge hopper
- Both side platforms made out of SS 304 Square pipes
- Drive and non-drive roller are rubber lined
- Overall length of conveyor 15 ft
- Suitable geared motor - 01 HP

9. ELECTRICAL CONTROL PANEL -ONLY

- Suitable for above motors
- The panel consists of:
- Contactors, relay, push buttons etc.
- MS powder coated panel with stand

10. WOOD FIRED BOILER -

11. STEAM PIPELINE, FITTING AND INSUALTION -



HEIGHT ALL ROOMS 10FT EXTERNAL

SR. NO	DESCRIPTION	QTY	UNIT
A	PUF WALL/CEILING INSULATION, FLOOR INSULATION AND DOORS PART ALONG WITH ACCESSORIES		
1	SUPPLY AND INSTALLATION OF 150MM THICK WALL AND CEILING INSULATED PUF PANELS AS PER TECHNICAL SPECIFICATIONS FOR BLAST FREEZER	85.7	SQM
2	SUPPLY AND INSTALLATION OF 150MM THICK BARE SLAB FLOOR INSULATION AS PER TECHNICAL SPECIFICATIONS FOR BLAST FREEZER	20	SQM
3	SUPPLY AND INSTALLATION OF 120MM THICK WALL AND CEILING INSULATED PUF PANELS AS PER TECHNICAL SPECIFICATIONS FOR FREEZER ROOM	492.7	SQM
4	SUPPLY AND INSTALLATION OF 120MM THICK BARE SLAB FLOOR INSULATION AS PER TECHNICAL SPECIFICATIONS FOR FREEZER ROOM	222.7	SQM
5	SUPPLY AND INSTALLATION OF 60 MM THICK WALL AND CEILING INSULATED PUF PANELS AS PER TECHNICAL SPECIFICATIONS FOR ANTE ROOM	45.2	SQM
6	SUPPLY AND INSTALLATION OF 80 MM THICK WALL PANELS FOR CLOSING AIR PATH FOR BLAST ROOM	14.6	SQM
7	SUPPLY AND INSTALLATION OF SWING TYPE HINGED DOOR OF SIZE 1200MM X 2100MM, 150MM THICK PUF, HEATER IN FRAME AND LEAF	1	NOS
8	SUPPLY AND INSTALLATION OF SWING TYPE HINGED DOOR OF SIZE 1200MM X 2100MM, 120MM THICK PUF, HEATER IN FRAME AND LEAF	1	NOS
9	SUPPLY AND INSTALLATION OF SWING TYPE HINGED DOOR OF SIZE 900X2100MM IN 60 MM THICKNESS FOR ANTE ROOM	1	NOS
10	SUPPLY AND FIXING OF BOTTOM C CHANNEL, INNER AND OUTER PCGI FLASHINGS FOR ALL CHAMBER.	343	RMT
11	SUPPLY OF INSTALLATION RELATED ACCESSORIES LIKE SILICON SEALANT, POP RIVETS, SELF-TAPPING SCREWS, ETC.	623.6	SQM
12	SUPPLY OF PUF CHEMICAL (MDI AND POLYOL)	50	KG
B	REFRIGERATION UNITS		
1	SUPPLY AND INSTALLATION OF AIR COOLED CONDENSING UNIT WITH 10KW X 2 NOS REFRIGERATION CAPACITY @ MINUS 18 DEG C ROOM TEMP. AND 42DEG C AMBIENT, EACH CONDENSING UNIT ARE WITH BITZER SEMI-HERMETIC COMPRESSOR, R404A REFRIGERANT, AIR COOLED CONDENSER COIL WITH FANS, HP/LP, FILTER DRIER, ACCUMULATOR, OIL SEPARATOR, SOLENOID VALVE	2	NOS
2	SUPPLY AND INSTALLATION CEILING SUSPENDEED AIR COOLING UNIT FOR FREEZER ROOM, REFRIGERATION CAPACITY 10KW X 2 NOS @ MINUS 18 DEG C ROOM TEMP. AND 42 DEG C AMBIENT TEMP., REFRIGERANT R404A, ELECTRICAL DEFROST HEATER AT COIL AND TRAY	2	NOS
3	SUPPLY AND INSTALLATION OF CU PIPING, INSULATION, CABLING BETWEEN INDOOR AND OUTDOOR. DISTANCE CONSIDERED 8MTR BETWEEN INDOOR TO OUTDOOR	2	NOS
4	SUPPLY AND INSTALLATION OF HEAVY DUTY RIGID UPVC PIPES		

	FOR AIR COOLING UNIT CONDENSATE COMPLETE WITH U TRAP AND NECESSARY SUPPORT.	2	NOS
5	SUPPLY AND INSTALLATION OF ELECTRICAL CONTROL PANELS WITH MCB, CONTACTORS, OLR, DIGITAL TEMP. CONTROLLER AND DISPLAY	2	NOS
6	SUPPLY OF 1ST CHARGE OF REFRIGERANT R404A AND COMMISSIONING CHARGES	2	NOS

DESIGN AND TECHNICAL SPECIFICATIONS –

SR. NO.	DESCRIPTION	TECHNICAL DETAILS/CONFIRMATIONS
1	SIZE OF THE BLAST ROOM	15FT X 12FT X 12FT (L X W X H IN FT)—ONLY INSULATION CONSIDERED (REFRIGERATION PART EXCLUDED)
2	SIZE OF FREEZER ROOM	60FT X 48FT X 12FT (L X W X H IN FT)
3	STORAGE CAPACITY OF FREEZER ROOM	200 MT
4	SIZE OF THE ANTE ROOM	12FT X 10FT X 12FT (L X W X H IN FT)
5	TYPE OF WALL AND CEILING PANELS	1000MM WIDTH, CONTINUOUS PUF INSULATED PANELS
6	TYPE OF JOINTS	TONGUE AND GROOVE JOINTS
7	INSULATION MATERIAL	CFC FREE POLYURETHANE FOAM INSULATION (PUF)
8	DENSITY OF PUF	40 KG/M3 +/- 2
9	THERMAL CONDUCTIVITY (LAMBDA VALUE) W/MK	0.020 W/MK
10	WALL AND CEILING PUF PANELS THICKNESS FOR BLAST FREEZER	150MM THICK
11	WALL AND CEILING PUF PANELS THICKNESS FOR FROZEN FOOD STORAGE	120MM THICK
12	WALL AND CEILING PUF PANELS THICKNESS FOR ANTE ROOM	60MM THICK
13	MOC OF SHEET	PRE COATED GALVANIZED IRON ON BOTH SIDE
14	HOT DIP GALVANIZATION ON PRE COATED GI	120 GSM
15	YIELD STRENGTH MPA	350 MPA
16	ADHESION STRENGTH (FOAM TO STEEL)	120 KPA
17	DIN 4102 STANDARD	B3 GRADE
18	FLOOR INSULATION	150MM BARE PUF FOR BLAST, 120MM FOR FROZEN STORAGE
19	VAPOUR BARRIER FOR PUF FLOOR INSULATION	BOTH SIDE 250MICRON POLYSHEET
20	DOORS	SLIDING TYPE DOORS AND SWING TYPE
21	SIZE OF THE DOOR FOR BLAST	1200MM X 2100MM
22	SIZE OF THE DOOR FOR FREEZER STORAGE	1200MM X 2100MM
23	PUF PANELS, DOORS AND ANGLES COLOUR	RAL 9002--OFF WHITE COLOUR
24	ANGLES/FLASHING	INCLUDED IN BOQ
25	SILICON SEALANT, RIVETS, SCREWS	INCLUDED

BASIS OF DESIGN -
 BLAST FREEZER - AMMONIA BASED
 TOTAL PRODUCT LOAD: 5 MT PER BATCH
 BATCH TIMING: 6 to 8 HRS
 LOAD CYCLES: 2 CYCLES OF 8.0 MT PER DAY
 PRODUCT INCOMING TEMP. - + 30 DEG. C.
 PRODUCT TO BE COOLED TO: (-) 20 DEG. C.
 ROOM TEMP. TO BE MAINTAINED - (-) 20 DEG. C.
 EVAPORATIVE TEMP. - (-) 40 DEG. C.
 CONDENSING TEMP. 40 DEG. C.
 TOTAL REFRIGERATION LOAD - 30 TR

Scope of supply - As per details below:

SR. NO	DESCRIPTION	QTY
1	COMPRESSORS - KIRLOSAKAR -42 TWO STAGE, AMMONIA RECIPROCATING COMPRESSORS REFRIGERATION CAPACITY 15.44 TR (54.15 KW) EACH AT 850 RPM.	01 NOS
2	COMPRESSOR ACCESSORIES - DRIVE SET WITH FLY WHEEL, MOTOR PULLEY AND V BELTS BASE FRAME, SUCTION AND DISCHARGE STOP VALVES, OIL SEPARATOR, CUTOUPS AND GAUGES, TUBING & FERRULE AND TOOL KIT.	01 SET
3	ELECTRIC MOTORS- 75 HP: 4 POLE, TEFC, SQ. CAGE, INDUCTION MOTORS, 1440 RPM, ANY REPUTED BRAND	01 NOS
4	STAR DELTA STARTERS - FOR ELECTRIC MOTORS	01 NOS
5	ALFA LAVAL MAKE PHE TYPE AMMONIA CONDENSER - AT 40 DEG. C. CONDENSING TEMP 150 TR HEAT REJECTION CAPACITY MODEL: M-10-BWFDR NO. OF PLATES: 50 NO. (EFFECTIVE PLATES-48 NOS.) AMMONIA FLOW RATE: 704.4 KG/HR WATER FLOW RATE: 52970 KG/HR MONO BLOCK WATER PUMPS: 5 HP X 2 NOS. (1 AS STAND BY)	01 NOS
6	AMMONIA RECEIVER - THICKNESS OF SHELL 14 MM, DISH ENDS 14 MM SIZE - 20 FEET LONG X 24" DIA. WITH HIGH PRESSURE SIDE GLASS, SAFETY, PURGE AND DRAIN VALVES. WORKING PRESSURE 13 TO 15 KG/CM2 TEST PRESSURE 21 KG/CM2 WATER SPRINKLER OVER AMMONIA RECEIVER	1 NOS
7	AMMONIA AIR COOLING UNITS DESIGN DUTY 54 KW (15 TR) EACH WITH 4 X 710 MM AEROFOIL FANS WITH 2.2 KW MOTORS, 8 ROWS 3FPI, AIR VOLUME 19M3/S. 2 UNITS IN THE CHAMBER.	1 NOS
8	VALVES, FITTINGS AND CONTROLS METALEX MAKE VALVES AND STANDARD CONTROLS	LOT

9	WATER PIPING AND FITTING SUPPLY, FABRICATION, FITTING AND FIXING OF GI B CLASS PIPES FOR INTER CONNECTING CONDENSER, COMPRESSOR JACKET COOLING, DE- FROSTING AND DRAINED WATER FROM AIR COOLING UNITS.	LOT
10	AMMONIA PIPING MS C CLASS REFRIGERANT PIPING, VALVES AND FITTINGS FOR INTER CONNECTING HIGH AND LOW SIDE EQUIPMENTS FOR CLOSE HOOK-UP OF THE EQUIPMENT.	LOT
11	INSULATION OF SUCTION LINES EPS INSULATION WITH ALUMINUM CLADDING FOR SUCTION LINES	LOT
12	MCC PANEL CUBICAL TYPE SWITCH BOARD PANEL WITH BUS BARS, INCOMING ACB, INDICATING LAMPS, PUSH BUTTONS, SWITCHES, FUSE, VOLTMETER, VOLT METER SELECTOR SWITCH, AMMETER, AMMETER SWITCH, STARTER FOR COOLING UNIT FAN MOTORS, , CONDENSER PUMP, FEEDER FOR COMPRESSOR MOTORS ETC.	1 UNIT
13	POWER CABLING POWER CABLING FROM MCC PANEL TO COMPRESSOR MOTORS, AMMONIA AND WATER PUMPS AND TO COOLING UNIT MOTORS.	LOT
14	FIRST CHARGE FIRST CHARGE OF AMMONIA GAS AND COMPRESSOR LUB. OIL.	LOT
15	ERECTION & COMMISSIONING TOTAL ERECTION & COMMISSIONING OF THE ENTIRE REFRIGERATION SYSTEM OF THE PLANT	1 JOB

EXCLUSIONS -

1. ANY TYPE OF STRUCTURAL AND CIVIL WORK
2. CIVIL FOUNDATION FOR ALL OUTDOOR UNITS
3. TRANSPORT AND UNLOADING OF MATERIALS AT SITE.
4. PCC/KOTA OVER FLOOR INSULATION
5. 6. SCAFFOLDING / LIFTING PLATFORM TO BE PROVIDED BY CUSTOMER FREE OF COST TO WORK @ 3.65 MTR HT.
7. MAIN THREE PHASE SUPPLY TO EACH ELECTRICAL PANEL OF OUR CONDENSING UNIT SHOULD BE GIVEN BY CUSTOMER.
8. MS STAND/FABRICATION WORK FOR INDOOR UNITS OF FREEZER UNITS
9. MAIN DISTRIBUTION PANELS.
10. CABLES FROM MAIN DISTRIBUTION PANELS UPTO EACH OUTDOOR UNIT'S ELECTRICAL PANELS WILL BE IN CUSTOMER'S SCOPE.
11. FREIGHT FROM MANUFACTURING UNITS TO SITE
12. ANY OTHER ITEMS OTHER THAN SPECIFIED IN OUR BILL OF QUANTITIES AND SCOPE OF WORK.
13. MS FRAME WORK REQUIRED TO HANG COOLING COILS IN THE CHAMBERS
14. OXYGEN, ORGAN AND LPG CYLINDERS REQUIRED AT THE SITE FOR WELDING AND RELATED TOOLS

Exclusion: client scope

1. Water piping, electrical cabling and main electrical power panel
2. Civil & electrical connections / wiring up to our motor / equipment's etc.
3. Legal documentation, inspection of boiler from local IBR authority
4. Other than above mentioned on client scope

COMMERCIAL TERMS & CONDITION:

1	Price Basic	Ex-Works Pune
2	P & F	Extra @ 3%
3	GST	Extra @18%
4	Freight	Extra to be borne by Purchaser
5	Transit & Insurance	to be arranged by Purchaser
6	Payment Terms	60 % advance along with Purchase Order. 40 % balance along with taxes & duties against Performa invoice before dispatch of equipment.
7	Delivery Period	12 weeks from the date of receipt of your techno-commercially clear purchase order / Drawing approval whichever is later.
8	Validity	30 days from the date of this offer.
9	Inspection and Design	We will carry out inspection as per standard Procedure. In case you desire to inspect, one Week notice will be given for final inspection At our works/our subcontractor's works. In inspection is not arranged within the period, it will be treated as waiver and equipment will be dispatched with our internal inspection Report. In case of 3rd party inspection, the charges If required any design changes in above mentioned equipment's and layout drawing, we can right to change.
10	Supervision During Erection & Commissioning	1. Our charges for supervision of Erection and Commissioning will be Rs.2, 500 /- per man day. To and fro Air/Rail fare shall be borne by you. You shall provide free lodging and boarding and local charges 2. and same for our executive 3.Tools and tackles, labor for erection and commissioning of all equipment's - on

		client scope
11	Specifications	Specifications, dimensions, design, description, shades of paint etc are not binding on supplier in minute details and are subject to reasonable alteration / change without notice.
12	Cancellation	Order received and acknowledged by supplier shall not be subject to cancellation, either wholly or partly for any reason whatsoever without supplier's written consent
13	Jurisdiction	All contracts between purchaser and supplier are deemed to have entered into at Pune and are therefore subject to the Jurisdiction of Courts at Pune
14	Warranty	We will warrantee the equipment for a period of 12months from the date of commissioning or 18 months from the date dispatch whichever is earlier The warrantee hold good for defective material and or faulty workmanship only and does not apply to normal wear and tear during operation as also to damage due to faulty handling/ operation of equipment. This warrantee is subject to the equipment being erected / commissioned under our supervision
15	Force Majeure	Acts of God, Natural Phenomenon including but not limited to flood, earthquake, typhoon and epidemic Acts of Government, Domestic or Foreign, including but not limited to declared or undeclared war, priorities, embargoes, quarantines, power cuts, strikes, lockouts, sabotages and acts of workmen including those of our subcontractor's workmen If the work gets delayed due to force majeure conditions, suitable extension of time shall be granted to enable us to complete the work

We hope you will find our offer in line with your requirement. In case you require any additional information, please feel free to contact us.

Thanking you and assuring you of our best attention and services at all times, we remain.

Yours faithfully

For GURU ENGINEERS, PUNE