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## Technical Specification and Quotation Form of Compressor

Fiscal Year: 2081/82

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Type	4 Piston Reciprocating Compressor or Screw Compressor			
2	Refrigerant	Ammonia (NH3) or Feron (R-22, R404A)			
3	Capacity	≥ 30 TR (Tons of Refrigerant)			
4	Motor Power	≥ 30 HP			
5	Cooling Method	Air Cooled or Water-Cooled			
6	Lubrication	Forced lubrication System for continuous operation			
7	Construction Material	Generally Heavy Duty Cast Iron or Steel for high durability			
8	Speed	Typically around 900-1800 rpm			
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Type	6 Piston Reciprocating Compressor or Screw Compressor			
2	Refrigerant	Ammonia (NH3) or Feron (R-22, R404A)			
3	Capacity	≥ 30 TR (Tons of Refrigerant)			
4	Motor Power	≥ 30 HP			
5	Cooling Method	Air Cooled or Water-Cooled			
6	Lubrication	Forced lubrication System for continuous operation			
7	Construction Material	Generally Heavy Duty Cast Iron or Steel for high durability			
8	Speed	Typically around 900-1800 rpm			



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### Technical Specification and Quotation Form of Receiver

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Type	Horizontal or Vertical Refrigerant Receiver			
2	Material	Mild Steel (MS)- Heavy duty, corrosion protected (painted or galvanized)			
3	Capacity	≥ 25 kg holding capacity of refrigerant charge			
4	Connections	Inlet, Outlet, Safety valve port, liquid level gauge, drain connection			
5	Testing	Hydostatic pressure test completed			

### Technical Specification and Quotation Form of Expansion Valve

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Type	Thermostatic Expansion Valve			
2	Refrigerant Compatibility	For Ammonia and Feron plants			
3	Flow Capacity	≥ 15 TR (Tons of Refrigerant)			
4	Body Material	Forged brass or SS for durability			
5	Temperature Range	-40°C to +10°C operating range			

### Technical Specification and Quotation Form of Copper Coil

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Material	High grade pure copper			
2	Type	Seamless copper tube (to handle pressure and avoid leakage)			
3	Diameter	(7/8 inch)			
4	Temperature Range	suitable for -40°C to +150°C			
5	Surface Finish	Clean, Bright and free from oxidation			





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### Technical Specification and Quotation Form of Oil Separator

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
	Type	Mechanical (Impaction and Centrifugat type) Oil Separator			
1	Material	Heavy duty Mild Steel or Carbon Steel			
2	Working Refrigerant	For Ammonia and Feron plants			
3	Capacity	≥ 15 TR (Tons of Refrigerant) 1" and 1.5"			
4	Temperature Range	suitable for -40°C to +60°C			
5	Connections	Inlet (from compressor discharge), Outlet (to condenser), Oil return line (with float valve or manual valve)			

### Technical Specification and Quotation Form of 40 kVA Stabilizer

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Type	Automatic Voltage Stabilizer			
2	Capacity	40kVA			
3	Input Voltage	340 V to 470 V for 3 phase system			
4	Output Voltage	400 V ±1%- Stable 3 phase output			
5	Frequency	50 Hz			
6	Phase	3-phase, 4-wire			
7	Cooling Type	Air Cooled or Oil-Cooled			
8	Operating Temperature	-5°C to +50°C			
9	Protection Features	Over-voltage protection, Under-voltage protection, Overload protection, Short-circuit protection, Bypass system (manual or automatic)			
10	Display	Digital Voltmeter and Ammeter for input/output			
11	Enclosure	MS Powder Coated Cabinet (corrosion resistant for ice plant environment)			



### Technical Specification and Quotation Form of 40 kVA Stabilizer

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Type	Manual Voltage Stabilizer			
2	Capacity	40kVA			
3	Input Voltage	340 V to 470 V for 3 phase system			
4	Output Voltage	400 V $\pm$ 1%- Stable 3 phase output			
5	Frequency	50 Hz			
6	Phase	3-phase, 4-wire			
7	Cooling Type	Air Cooled or Oil-Cooled			
8	Operating Temperature	-5°C to +50°C			
9	Protection Features	Over-voltage protection, Under-voltage protection, Overload protection, Short-circuit protection, Bypass system (manual or automatic)			
10	Display	Analog or Digital Voltmeter and Ammeter for input/output			
11	Enclosure	MS Powder Coated Cabinet (corrosion resistant for ice plant environment)			

### Technical Specification and Quotation Form of Mild Steel (MS) Can

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Material	Mild Steel (MS), galvanized or painted to prevent corrosion, 18 gauge			
2	Shape	Rectangular or Tapered Rectangular			
3	Capacity	At least 50 Kg of ice per can			
4	Dimensions	At least 36"*15"*7.5" (Length*Breadth/width*Thickness)			
5	Weight of empty Can	At least 13 Kg			





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### Technical Specification and Quotation Form of 3-Phase 30 HP Motor

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Power Rating	30 HP (22.37kW)			
2	Type	Squirrel cage induction motor or specify if other			
3	Voltage	415 V (Common Standard for 3-phase supply)			
4	Frequency	50 Hz			
5	Current	Approximately 35-45 A at full load			
6	Speed	≥1350 RPM			
7	Starting Method	Star-Delta Starter/Soft Starter			
8	Enclosure Type	Totally enclosed Fan cooled for dusty, moist ice plant environment			
9	Insulation Class	Class F			
10	Duty	S1 (Continuous Duty)			
11	Warranty	At least 1 year or specify item on which warranty is applied			

### Technical Specification and Quotation Form of 3-Phase 5 HP Motor

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Power Rating	5 HP (3.73kW)			
2	Type	Squirrel cage induction motor or specify if other			
3	Voltage	415 V (Common Standard for 3-phase supply)			
4	Frequency	50 Hz			
5	Current	Approximately 7-8 A at full load			
6	Speed	≥1350 RPM			
7	Starting Method	DOL Strter			
8	Enclosure Type	Totally enclosed Fan cooled for dusty, moist ice plant environment			
9	Insulation Class	Class F			
10	Duty	S1 (Continuous Duty)			
11	Warranty	At least 1 year or specify item on which warranty is applied			



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### Technical Specification and Quotation Form of 3-Phase 2 HP Motor

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Power Rating	2 HP (1.5kW)			
2	Type	Squirrel cage induction motor or specify if other			
3	Voltage	415 V (Common Standard for 3-phase supply)			
4	Frequency	50 Hz			
5	Current	Approximately 3-4 A at full load			
6	Speed	≥1350 RPM			
7	Starting Method	DOL Strter			
8	Enclosure Type	Totally enclosed Fan cooled for dusty, moist ice plant environment			
9	Insulation Class	Class F			
10	Duty	S1 (Continuous Duty)			
11	Warranty	At least 1 year or specify item on which warranty is applied			

### Technical Specification and Quotation Form of 1 HP Motor

S.No.	Particulars/Parameters	Required Specification	Offered Specification	Offered Price (with/without VAT if applicable)	
				Total Price in Figure (Rs.)	Total Price in Words
			Make:		
			Model:		
			Mfg. Year:		
			Country of Origin:		
1	Power Rating	1HP (0.75kW)			
2	Type	Squirrel cage induction motor or specify if other			
3	Voltage	415 V (Common Standard for 3-phase supply)			
4	Frequency	50 Hz			
5	Current	Approximately 1.5-2 A at full load			
6	Speed	≥1350 RPM			
7	Starting Method	DOL Strter			
8	Enclosure Type	Totally enclosed Fan cooled for dusty, moist ice plant environment			
9	Insulation Class	Class F			
10	Duty	S1			
11	Warranty	At least 1 year or specify item on which warranty is applied			
	Installation and Fitting Charge			Total Price in Figure (Rs.)	Total Price in Words
1	Installation and Fitting Charge for Ice Plant's Equipment and other accessories				