



INFORMATION SHEET FOR SUPPLY AND INTALLATION OF HVAC SYSTEM AT BOTTLING PLANT – HA.HOARAFUSHI

Reference No: FNK-I/IUL/2026/146

Issued on: 12th September 2026

Issued by:

Fenaka Corporation Limited

Male', Republic of Maldives

Section I: Instruction to Bidders

A. General	
1. Scope of Bid	1.1 Fenaka Corporation Limited requests quotations for SUPPLY AND INTALLATION OF HVAC SYSTEM AT BOTTLING PLANT accordance with <i>Section III, Technical Specifications</i> 1.2 It is in Fenaka Corporation Limited's discretion to cancel this bid invitation at any time.
2. Eligible Participants	2.1 Local companies registered in Maldives are eligible to participate in the tender 2.2 Foreign companies are eligible to participate in the tender only if the total bid value is above 2,500,000 Maldivian Rufiyaa.
B. Preparation of the Bid	
3. Bid Prices	3.1 The unit price of each item and the total price shall be clearly indicated in the quotation 3.2 All items shall be quoted in the bid (please refer to <i>Section III, Technical Specifications</i> for the details of required items) 3.3 Quotation shall separately indicate the additional charges such as freight charges, insurance, etc. 3.4 The bidder shall submit supply quotation on CIF basis to Male' port and separate cost for installation
4. Currency	4.1 The bidder shall quote entirely in Maldivian Rufiyaa
5. Alternative Bids	5.1 Bidders can submit a maximum of two (2) options
6. Validity of Bids	6.1 Quotation shall remain valid for minimum sixty (60) days from the date of bid opening
7. Technical Compliance	7.1 All relevant information including the brand shall be given to enable technical evaluation of quoted items 7.2 If the manufacturer or assembler is not the same as the bidder, a document indicating that manufacturer or assembler is willing to sell the item to the bidder is required

	7.3 Technical compliance letter will be required to enable technical evaluation 7.4 If the goods do not comply with the requirements mentioned in <i>Section III, Technical Specifications</i>, the bid will be rejected during evaluation.
8. Documents Comprising the Bid	8.1 Quotation (inclusive of the delivery period and payment terms) 8.2 Specifications of the offered product 8.3 Details of the company - Company profile/background - Company registration certificate - GST registration certificate (for local bidders only) - TAX clearance report (6 months validity) - Contact details (name, designation, mobile number, and e-mail address) 8.4 Experience letters, if available - Letters within past five (5) years - Relevant experience letters - Letters with project name and value 8.5 One (1) Pen Drive with original bid document scanned and written. CD will not be accepted 8.6 Bids lacking the documents above are subjected to be rejected during the bid opening
9. Format of Bid	9.1 The Bidder shall submit two (2) sets of the bid document (1 original and 1 copy), enclosed separately in two envelopes, and sealed with company stamp 9.2 All pages of the bid document shall be stamped and bound properly (excluding the bid security)
C. Bid Submission	

10. Sealing and Marking Bid Document	10.1 The bid document shall be sealed properly in an envelope clearly marked 'ORIGINAL' or 'COPY', with the name of the company and the tender reference number (FNK-I/IUL/2026/141)
11. Bid Opening	11.1 The bids will be opened on 17th September 2026, 1100hrs in the presence of bidders 11.2 Bids will be opened at: Fenaka Corporation Limited, 7th Floor Ports Building, Hilaalee Magu, K. Male', Republic of Maldives 11.3 Bids received electronically will not be accepted
12. Bid Rejection	12.1 Fenaka Corporation Limited shall not consider any bidders that arrive after the deadline for submission 12.2 Bidders that do not register for the tender are unable to participate in the bid opening 12.3 Bids lacking the documents mentioned in 9. <i>Documents Comprising the Bid</i> (except 9.5 <i>Experience letters</i>) and that do not comply with 10. <i>Format of Bid</i> are subjected to be rejected

Proposal Cost: 85 points for the lowest price

- (Lowest price / proposed price) x 85

Supply and Installation: 10 points for the lowest delivery period

- (Lowest supply & Installation / proposed supply & Installation) x 10

Credit Period: 05 points for the maximum credit period

- (Proposed credit period / longest credit period) x 05

Note: Any discrepancy in technical details specified in quotation with technical specification document, the specification shall prevail.

Section III: Technical Specifications

Description
SUPPLY AND INTALLATION OF HVAC SYSTEM AT BOTTLING PLANT

TERMS OF REFERENCE -SUPPLY AND INSTALLATION OF HVAC SYSTEM AT HA.HOARAFUSHI BOTTLING PLANT

Supply, Installation, Testing and Commissioning of VRF Air Conditioning System for Ha. Hoarafushi Water Bottling Plant

1. Project Background

Fenaka Corporation Limited requires a complete VRF HVAC system for the Ha. Hoarafushi Water Bottling Plant (5,100 sq.ft, 19 ft ceiling height) to provide cooling, ventilation and humidity control suitable for bottling operations.

2. Scope of Works

Design verification, supply, installation, testing, commissioning, training and handover of the complete HVAC system including VRF outdoor units, indoor units, FAHU system, ductwork, piping, controls and electrical works.

3. Design Basis

Cooling Capacity: 45-50 TR. Indoor Temperature: 22-25°C. Relative Humidity: 50-60%. Fresh Air: 3,000-4,000 CFM. 2 x VRF Outdoor Units. 10 x Ceiling Suspended Indoor Units (54,000 BTU/hr each).

4. Technical Specifications

Inverter VRF technology, anti-corrosion outdoor units, insulated copper refrigerant piping, insulated GI ductwork, washable filters, centralized controller and automatic restart.

5. Contractor Qualifications

Minimum 5 years experience and at least 3 similar completed HVAC projects.

6. Submittals

Shop drawings, calculations, datasheets, method statements, testing reports, O&M manuals and as-built drawings.

7. Testing & Commissioning

Pressure testing, vacuum testing, airflow balancing, temperature verification and performance testing.

8. Training

Provide operation and maintenance training for Fenaka personnel.

9. Warranty

12 months defects liability period, minimum 5 years compressor warranty and minimum 1 year parts warranty.

10. Tender Evaluation

Technical compliance, experience, delivery period, warranty support and financial proposal.

11. BOQ Structure

Preliminaries, VRF equipment, FAHU, refrigerant piping, ductwork, electrical works, testing and commissioning.

12. Contract Type

Lump Sum Contract including all materials, labor, transportation, testing, commissioning and handover.

1. Equipment Schedule & Specifications

Outdoor Units (ODU) 2 Units

- **System Type:** Air-Cooled Inverter Heat Pump module.
- **Configuration:** 2-unit master/slave modular combination operating on a balanced sequence logic to distribute run hours evenly.
- **Compressor:** 100% Inverter-driven DC Scroll compressor per module.
- **Refrigerant:** Factory pre-charged with R-410A or R-32 eco-friendly refrigerant.
- **Casing:** Weatherproof, anti-corrosive galvanized steel panels with an electrostatically applied baked enamel finish.
- **Coil Protection:** Hydrophilic aluminum fins with factory-applied anti-corrosive coating (minimum 3,000-hour salt spray rating).
- **Power Supply:** 3-Phase, 380–415V, 50Hz.

Indoor Units (IDU) 10 Units

- **Quantity:** 10 units (type as per floor plan: 4-Way Cassette or Ceiling Concealed Ducted).
- **Capacity:** Sized to match individual room heat load calculations.
- **Expansion Valve:** Integrated Electronic Expansion Valve (EEV) to precisely regulate refrigerant flow per zone.
- **Drainage:** Built-in automatic condensate drain pump with a minimum lift of 850 mm.
- **Power Supply:** 1-Phase, 220–240V, 50Hz.

2. Supply Scope of Work

The contractor must source and deliver the following items to the job site:

- **2 Outdoor Units** complete with modular structural connection kits.
- **10 Indoor Units** complete with standard air filters and decorative grilles (for cassettes).

- **REFNET Joints:** Factory-designed, Y-shaped refrigerant branch piping kits (minimum 3 sets required to split lines to 10 IDUs).
- **Controllers:** Ten (10) individual backlit wired wall controllers (or wireless remotes) and one (1) central controller if specified.
- **Mounting Accessories:** Anti-vibration rubber pads and hot-dip galvanized mounting brackets for the ODUs.

3. Installation Specifications

Refrigerant Piping Network

- **Pipe Material:** Seamless, deoxidized high-phosphorus copper piping (Type L / Heavy Wall).
- **Brazing Method:** Continuous dry nitrogen purging at 0.02 MPa (3 PSI) during all brazing joints to prevent internal carbon scale buildup.
- **Branching (REFNET):** Must be installed purely horizontally or vertically. Provide at least 500 mm of straight pipe run before and after each joint.

Piping Insulation

- **Material:** Class O fire-rated, closed-cell nitrile rubber foam insulation.
- **Thickness:** Minimum 19 mm for gas lines and 13 mm for liquid lines.
- **Execution:** Liquid and gas lines must be insulated individually. Seams must be sealed with heavy-duty adhesive and vapor-barrier tape.

Control & Power Wiring

- **Control Wiring:** 2-core, 1.25 mm² to 1.5 mm² stranded, shielded copper twisted-pair cable.
- **Power Cables:** Dedicated copper power wiring inside PVC or Galvanized Iron (GI) conduits, physically separated from the control wiring by at least 50 mm.