Dated: 02/12/2025

Department of Mechanical Engineering Delhi Technological University Shahbad Dualatpur, Bawana Road, Delhi - 110042

No. DTU/MED/HOD/2025/2000

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Department of Mechanical Engineering invites a quotation for the procurement of "Microchannel Based Circular Flat Plate Collector for Water Heating" under DTU

sponsored Faculty Interdisciplinary Research Project (FIRP) Project.

RE-NOTICE INVITING QUOTATION

Sealed quotation (<u>mentioning on top of envelop as F.NO.</u> No. DTU/MED/HOD/2025/2000) should be sent to the following address (through speed post/ courier) at the latest by 12/12/2025:

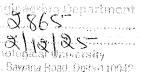
The HOD, Department of Mechanical Engineering, Delhi Technological University, Bawana Road, Delhi 110042

The quotations should be on the company's letterhead including GSTIN No. with reference no. as F.NO. No. DTU/MED/HOD/2025/2000.

The rate should be quoted and GST should be indicated separately as per the prevailing GST Laws in Indian National rupees (INR) and also mention the total amount in the words

The technical specifications and details of the Microchannel Based Circular Flat Plate Collector for Water Heating are provided in the following table:

Sl.No.	Items/ Specifications	Quantity
1.	Solar Collector: Flat Plate Collector, 2m² approx, Circular with Microchannels, Flat Plate Collector 2m² approx, rectangular. Data Acquisition System: Data Logger, 16 channel, Output to pen drive or PC Input can be PT100, Thermocouple or 4-20mA sensors, a Temperature controller with a 7-segment digital display for current and set temperatures. Temperature Sensors: PT100 Sensors, threaded, 4mm probe thickness, 2 inch length Hotwire Anemometer, probe type for wind velocity measurement: Wind speed 0.1 to 10 m/s Magnetic Stirrer with heater for mixing of fluids, Ultrasonicator, used for dispersion of fluids. pH meter for water pH measurement Circulation pump, low power, solar-powered DC pump Heat Exchanger, PHX brazen type, 1 Tonne capacity Gear Pump for input fluid pumping, with electric motor (AC 1 phase, FHP power rating) Gear motor for pumping hot fluid Demineralizer for water purification Copper Absorber Plate material (as per the required size) Solarimeter: for solar insolation measurement	01



Microprocessor module circuit IoT

Electric Heater, with Ni-Chrome element, for additional heating of

fluid, of suitable wattage

Mild Steel Tank for water storage

Mild Steel Tank for pressure management

Solar Photovoltaic PV Panel 20 Watt

Valves of following type/purpose, as needed: Non-Return valve,

Air Bleed Valve

Make up Fluid Valve, Brass Valve with Teflon lining, Pressure

Release Valve, By-Pass Valve, Connections for Pip

Metal connectors and Fittings as needed

Terms & conditions of the NIQ

- 1. The quoted Price should be inclusive of applicable GST
- 2. Product supplied must be of good quality.
- 3. A data-sheet and manual of the above-said items should be provided.
- 4. Details of service center declaration should be provided for the items.
- 5. Warranty of the item should be a minimum of one year.
- 6. Mode of payment would be subject to the satisfactory completion of delivery to the roof top fourth floor, Department of Mechanical Engineering, DTU and working demonstration of the apparatus by expert personnel of the supplier.
- 7. Delivery and successfully working demonstration of apparatus by supplier technical experts delivery to the roof top fourth floor, Department of Mechanical Engineering, DTU, Delhi.

Dr. Manjunath K

Principal Investigator, FIRP

Department of Mechanical Engineering, DTU

Copy to:

1. Sr. Account Officer, DTU

2. HOD, (CC) request to upload on DTU website

3. Notice Board, MED