

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

No. DTU/MED/HOD/2025/2000

Dated: 02/12/2025

**RE-NOTICE INVITING QUOTATION**

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.

Sealed quotation (mentioning on top of envelop as F.NO. 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, 2m <sup>2</sup> approx, Circular with Microchannels, Flat Plate Collector 2m <sup>2</sup> 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	
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### 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