



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

Powai, Mumbai - 400076

Technical Specifications :

Item: Supply, Installation and Warranty of 1kW Microwave Heating System @2450 MHz compatible with standard waveguide WR340 consisting following subsystems:

S. No.	Item Name	Quantity	Technical Specifications
1.	Microwave Generator	1 No.	<ol style="list-style-type: none">Output power: ≥ 1 kWFrequency: 2450 MHz +/- 25 MHzOutput waveguide: WR340Cooling: Air-CooledMagnetron Type: 2M137A or equivalent or higherMust include compatible power supplyMust include all the accessories, connector cables of standard length required for operation.Must include isolator of following specifications:<ol style="list-style-type: none">Frequency – 2450 MHzMaximum Power Dissipation 3 kWWaveguide Size WR340Insertion Loss (Max.) 0.3 dBIsolation (Min.) 23 dB
2.	Microwave Generator	1 No.	<ol style="list-style-type: none">Output power: ≥ 1 kWFrequency: 2450 MHz +/- 25 MHzOutput waveguide: WR340Cooling: Air-CooledMagnetron Type: 2M137A or equivalent or higherMust include compatible power supplyMust include all the accessories, connector cables of standard length required for operation.

Note: The magnetron head and isolator should be of same make.

Installation:

- The supplier will have to install the system at purchaser's site. Satisfactory operation of the system will be tested at purchaser's site with all related hardware and software.

2. Supplier should provide necessary operation and maintenance manuals in triplicate along with technical specifications of each component with all related electrical and electronic drawings (Hard and soft copies both) and other accessories.
3. The item should be guaranteed for minimum 12 months of satisfactory operation.

Qualification Criteria of Bidder:

- a. Letter of providing after-sales support for at least 5 years after guarantee period is to be submitted.
- b. The bidders who have experience for supply and Onsite installation & Commissioning of 0.8 kW (output) or higher capacity Industrial Microwave Heating System are eligible to submit their bid. The supplier/ vendor should have supplied minimum 1 no. of such Industrial Microwave Heating System (capacities must be equal to or greater than 0.8kW) and copies of purchase order/ work orders of such supplies in past 5 years in support of confirmation should be submitted at the time of bid.
- c. The firm should not be under liquidation, court receivership or similar proceedings. A self-certified statement by the firm should be furnished.