

Annexure ‘B’

Subject: Reply of CUH on the quarries raised by the bidders during the Pre-bid Meeting held on 06/10/2025.

Name of Equipment: Microwave Synthesizer

Sr. No.	Name of firm	CUH Specification	Bidder’s Quarries	Reply of CUH
A.	Lab India Analytical Instruments Pvt. Ltd.			
(i)		Microwave Power: Minimum microwave power 250 W or more with power density 900 W/litre or more. The microwave power should be adjustable from 0 to 900 W, with a built-in PID controller to ensure accurate and stable heating during reactions.	Minimum microwave power 250 W or more with power density 900 W/litre or more. The microwave power should be adjustable from 0 to 250 W, with a built-in PID controller to ensure accurate and stable heating during reactions.	Microwave power may be read as “Minimum microwave power 250 W or more with power density 900 W/litre or more. The microwave power density should be adjustable from 0 to 900 W/litre, with a built-in PID controller to ensure accurate and stable heating during reactions.
(ii)		Hardware: Software-controlled magnetic stirring should be integrated, with adjustable speeds up to maximum 1200 rpm, to support a variety of reaction types and viscosities.	Software-controlled magnetic stirring should be integrated, with adjustable speeds, to support a variety of reaction types and viscosities.	No change
(iii)		Data Export: Should have facility to export the data in PDF files or excel file via USB	Data Export: Should have facility to export the data in PDF files or excel file via USB port.	Data Export may be read as “Should have facility to export the data in PDF files or excel file via USB

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		port. Should have facility to print via Wi-Fi facility	Should have facility to print via Wi-Fi facility/USB or through PC.	port. Should have facility to print via Wi-Fi /USB facility/PC"
(iv)		Accessories: Common for Both open and closed Setups Microwave Rotor or Sample Holder: Holds multiple vessels (6 15),ensures uniform microwave distribution Syringes: Leak-proof sampling port, 1 20 mL range, for sample withdrawal or injection Sample handling tools: Long tongs, heat-resistant gloves, vessel holders Consumables Startup Kit: Extra seals, septa, caps, stir bars (10 sets each recommended) Cleaning Tools: Vessel brushes, seal cleaners, PTFE-safe cleaning liquids	Kindly remove below accessories: Microwave Rotor or Sample Holder: Holds multiple vessels (6 15), ensures uniform microwave distribution Syringes: Leak-proof sampling port, 1 20 mL range, for sample withdrawal or injection Sample handling tools: Long tongs, heat-resistant gloves, vessel holders Consumables Startup Kit: Extra seals, septa, caps, stir bars (10 sets each recommended) Cleaning Tools: Vessel brushes, seal cleaners, PTFE-safe cleaning liquids	"Accessories if any associated with the monomode system should be supplied".
(v)		Upgradeable features Availability: FOR SOLID-LIQUID SYNTHESIS (Pressurized) Rotor with up to 15 slots, allowing flexible runs from 1 to 15 vessels	FOR SOLID-LIQUID SYNTHESIS (Pressurized) For Pressurized synthesis, you have already asked to quote pressurize vials of 100ml, 10ml and 30ml on last page of specifications; please	Upgradeable Features Availability for multimode systems are not required.

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		(single-vessel use must be supported). Minimum 8 vessels to be provided initially. -TFM with Teflon-coated leakproof silicone seals. working temperature: up to 260°C. Pressure capacity: up to 100 bar (1,500 psi). Compatible with 10 mL, 30 mL, 80 mL or more volume vessels for micro-to mid-scale synthesis. Option for glass and silicon carbide (SiC) vials for high-temperature reactions. PEEK reactor caps for superior chemical resistance.	refer tender specs: no. of vessels. Kindly remove: Rotor with up to 15 slots, allowing flexible runs from 1 to 15 vessels (single-vessel use must be supported). Minimum 8 vessels to be provided initially. Vessel Volume > 100ml material PTFE - TFM with Teflon-coated leak proof silicone seals. Temperature range: 30 deg to 300 deg C with a heating rate >5 deg C/sec, working temperature: up to 260°C. Pressure capacity: up to 100 bar (1,500 psi). Compatible with 10 mL, 30 mL, 80 mL or more volume vessels for micro- to mid-scale synthesis. Option for glass and silicon carbide (SiC) vials for high-temperature reactions.	

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			PEEK reactor caps for superior chemical resistance.	
(vi)		Method compliance: The system must comply with international and regulatory methods, like US EPA 3051, 3052, 3015, 3546; ASTM D4309-96, D5765, D6010; RoHS; WEEE; ELV; USP 232/233.	Kindly remove.	No Change
B.	Anton Paar Pvt. Ltd.			
(i)		a. Open atmosphere (reflux) synthesis	We suggest to remove this specification	No change. All other accessories and software associated with Monomode Microwave Synthesizer are required to be supplied.
(ii)		Cavity: The cavity must be constructed from corrosion- resistant stainless steel (SS316 or equivalent) and lined/coated (e.g., with PTFE or plasma coating) to resist chemical attacks from acids, bases, and solvent vapors. Cavity volume should be sufficient to accommodate a wide range of vessel sizes, from 5 mL to 100 mL or more.	The cavity must be constructed from corrosion- resistant stainless steel (SS316 or equivalent) and lined/coated (e.g., with PTFE or plasma coating) to resist chemical attacks from acids, bases, and solvent vapors. Cavity volume should be sufficient to accommodate a wide range of vessel sizes, from 4 mL to 30 mL or more.	
(iii)		Hardware: ✓ Open-vessel reactions using standard round-bottom flasks (5–125 mL), and	We suggest to remove this specification	
(iv)		✓ Sealed vessels	✓ Sealed vessels	

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		ranging from 5 mL to 100 mL or more	ranging from 5 mL to 30 mL or more	
(v)		Data export: Should have facility to export the data in PDF files or excel file via USB port. Should have facility to print via Wi-Fi facility	Should have facility to export the data in PDF files or excel file via USB port. Should have facility to print via USB.	
(vi)		Accessories: Joints (B24/40 or similar): adapters for thermometer, gas inlet, vacuum take-off. Vacuum/Pressure Relief Valve: Glass with PTFE stopcock, compatible with joint system Clamps and Retort Stand: Metal stands with universal clamps for flask and condenser. Clamps and Retort Stand: Metal stands with universal clamps for flask and condenser. Clamps and Retort Stand: Metal stands with universal clamps for flask and condenser.	Kindly remove this point	
(vii)		Accessories: Common for Both open and closed Setups ✓ Microwave Rotor or Sample Holder: Holds multiple vessels (6–15), ensures uniform	Kindly remove this point	

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		microwave distribution ✓ Syringes: Leak-proof sampling port, 1–20 mL range, for sample withdrawal or injection ✓ Sample handling tools: Long tongs, heat-resistant gloves, vessel holders ✓ Consumables Startup Kit: Extra seals, septa, caps, stir bars (10 sets each recommended) ✓ Cleaning Tools: Vessel brushes, seal cleaners, PTFE- safe cleaning liquids		
(viii)		Accessories: The same system must be capable and quoted with suitable accessories to conduct open vessel reactions with reflux facility in a round bottom flask up to 125 ml, and more should have the feature of purging to use the system with N ₂ gas atmosphere.	We suggest to remove this specification	Monomode Microwave Synthesizer with closed and open vessels provides wider options to users for performing the reactions. Hence, it is required. Therefore, all other accessories and software associated with Monomode Microwave Synthesizer are required to be supplied.
		Microwave-compatible reaction Vessels: Sizes: 10, 30, 80, 100 mL;	We suggest to change Microwave-compatible reaction Vessels: Sizes:4, 10, 30ml or more	
		Teflon-Coated Silicone Seals: Microwave-safe, reusable, available in multiple diameters	Teflon-Coated Silicone Seals: Microwave-safe, reusable, available in similar diameters	
		✓ Inert Gas Purge Tubes: PTFE or glass tubes for N ₂ /Ar,	Specification Should remain optional, as this application is not	

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		connectable to cap inlet ports	commonly required in microwave synthesis.	
		✓ Vacuum Line Adapter: Compatible with cap ports, for pre-evacuation or gas flushing.	Specification Should remain optional, as this application is not commonly required in microwave synthesis.	
(ix.)		Upgradeable features availability: Compatible with 10 mL, 30 mL, 80 mL or more volume vessels for micro- to mid-scale synthesis.	Compatible with 10 mL, 30 mL or more volume vessels for micro- to mid-scale synthesis.	
(x)		Vessel requirement: The vessel should have a capacity of a minimum 10 ml to 100 ml capacity or more, which allows the reaction involving in situ fluorination, reactive metals, caustic solutions at high temperature and pressure, and other aggressive environments.	The vessel should have a capacity of a minimum 10 ml to 30 ml capacity or more, which allows the reaction involving in situ fluorination, reactive metals, caustic solutions at high temperature and pressure, and other aggressive environments.	