

CHANGES IN EQUIPMENT SPECIFICATIONS FOR BID BULLETIN

Item No.	Unit	OLD SPECIFICATIONS	CHANGES IN SPECIFICATIONS
1	lot	BENCHTOP SPEED VACUUM CONCENTRATOR	
		speed vacuum concentrator can be used for drying samples that either aqueous, acidic, organic solvent and in solvent combinations	
		The system must include:	
		1. Benchtop concentrator	
		the lid is made of glass; lid latch with safety sensor, lid gasket is phenol free and chamber is powder-coated aluminum	the lid is made of acrylic or glass ; lid latch with safety sensor, lid gasket is phenol free and chamber is powder-coated aluminum
		microprocessor -controlled programming which can be used for controlling heat and should have a function to increase heat rapidly	can accommodate a large number of microcentrifuge tubes
		centrifugal motion using a brushless motor capable of achieving up to 1725 rpm	maximum g force is at least 250 and temperature range is 30degC - 80degC
		automatic vacuum release valve and built-in vacuum delay - speed must be achieved first prior applying vacuum.	
		with alarm to signal completion of run	
		2. Cold trap (-84degC)	
		CFC-free refrigeration system	
		with at least two 1/3 hp compressor that will lower the cold trap temperature to -84degC	should be capable of automatic defrost (periodic defrost without interrupting the concentration process), continuous chilling (for collection of solvents that do not freeze above -50degC), and manual defrost (continuous chilling with solvents that freeze above -50degC)
			should include at least 1 L glass vessel to collect condensed solvent (1 pc)
		3. Vacuum pump	
		diaphragm vacuum pump: can be used for aqueous and high boiling point, volatile and low boiling point liquids (organic) and combination of solvents.	diaphragm vacuum pump: can be used for aqueous and high boiling point, volatile and low boiling point liquids (organic) and combination of solvents.
		wetted parts of the pump must be made of PTFE or other fluoropolymers	
		displacement capacity: at least 33 L/38min or better	pressures can reach 2 mbar or below
		tubings and other fittings must be included	tubings and fittings must be included. Must also include pressure controller compatible to the vacuum pump
		4. Chemical traps	Delete
		must include a clear canister made of polypropylene and with a mounting bracket compatible with the cold trap	Delete
		must include acid trap insert. The insert must contain neutralizing dessicant which changes color to signal trap exhaustion	Delete
		must include moisture trap insert. The insert must contain dessicant which changes color to signal trap exhaustion	Delete
		must include solvent trap insert. The insert must contain molecular sieve	Delete
		5. Rotors	
		include 1 pc aluminum rotor compatible for aqueous and non-acidic (organic) solvents.	include 1 pc of solid aluminum rotor that can accommodate both 2.0 ml and 1.5 ml microcentrifuge tubes - at least 36 tubes
		include 1 pc 12-13 mm PTFE-coated rotor compatible for acidic solvents.	Delete
		can hold at least 40 tubes with a capacity of 1.5-2.0 ml	Delete
		6. Other accessories	
		glass trap - provides protection on the cold trap reservoir and lid from corrosives - with spare glass	should include additional 1 pc 1 L glass vessel to collect condensed solvent

vacuum tubings and clamps which is necessary for commissioning of the equipment	vacuum tubing, a tube cutter, catch pot, and pump control lead which is necessary for commissioning of the equipment
portable table for the whole unit. Chemical-resistant, two shelf cart that can accommodate the whole speed vacuum system.	
1 unit Automatic voltage regulator (AVR)	1 unit Automatic voltage regulator (AVR) - compatible to unit
1 unit Uninterrupted power supply (UPS) that is compatible and sufficient with the unit's power requirements	
Others features, etc.	
Voltage: 220-230 V, 50/60 Hz, units should be in international electrical configuration	
Warranty: 1 year warranty on parts and 2 years warranty on services	
Free Preventive maintenance after Year1 and Year2 (particularly for the pump)	Free preventive maintenance for 2 years
On-site training for the use and care of the unit	
Service maintenance readily available in Davao City	
Delivery period: 90 days after receipt of purchase order (PO)	
must provide picture of equipment (preferably colored) in the bid docs	

NOTED:

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