

July 30, 2019

Bid Bulletin No. 1

Subject: Supply, Delivery and Installation of Various Laboratory Equipment for Crop Biotechnology Center (Group IV) under PB 19-03-20

This bid bulletin is being issued to clarify and/or amend the technical specifications for the Supply, Delivery and Installation of Various Laboratory Equipment for Crop Biotechnology Center (Group IV) as follows:

Revised Technical Specifications:

Attached is the revised technical specifications for the complete details.

Please be guided accordingly.

(Original signed) AURORA M. CORALES BAC Vice-Chairperson





Section VII. Revised Technical Specifications for PB 19-03-20

Item	Specification	Statement of Compliance
		Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.1(a)(ii) and/or GCC Clause 2.1(a)(ii).
1.	Supply, Delivery and Installation of One (1) Unit 16.4-L Box Furnace Technical specifications: Capacity: 16.4 L/0.6 Cu. Ft Operating temperature: 100 to 1200°C Temperature control accuracy: $\pm 2^{\circ}$ C (at 1200°C) Maximum temperature reaching time: ~60 min Exterior material: Cold rolled steel plate with baked-on melamine resin finish Internal material: Ceramic fiber Sensor: R-thermocouple Heater: Iron-chrome wire or equivalent Heater: 1 kW Cooling fan type: Axial fan motor Temperature controller: PID control by microprocessor Temperature setting/display method: Digital setting by $\blacktriangle / \checkmark$ keys/digital display Overheat protection: Digital setting	





	Timer: 1 min to 99 hr 59 min digital	
	setting, auto-start, quick auto-stop	
	Electrical requirement: 220V; 50-60 Hz;	
	4500W	
	Other features:	
	• with deviation correction, power	
	outage compensation, and key lock	
	• with self-diagnosis circuit in case of	
	abnormal temperature sensor,	
	autoheat protection), averheat	
	protector, avercurrent ELB, keylock	
	 Light gauge overbend (LGO) heating 	
	elements with Moldatherm	
	insulation for efficient and	
	economical transfer of heat to	
	chamber with low exterior	
	temperatures or equivalent	
	 Variable heat-up rate eliminates 	
	thermal shock to materials with	
	quick heat-up and cool down rates	
	 Choice of side hinge or vertical lift 	
	door	
	 Air vent and air inlet for inert 	
	atmosphere exchange	
	 Self-tuning digital instrumentation 	
	for precise temperature setpoint and	
	display	
	 Platinel IIO thermocouple for long- 	
	term stability	
	 Main power on/off switch on control 	
	panel; control panel designed for	
	easy maintenance access	
	 Safety door switch to interrupt 	
	power to heating element and	
	minimizes exposure to end-user	
	 Removable shelves for versatility 	
	 Removable sherves for versatility 1 two-part shelf included standard 	
	 Moldatherm hearthplate supports 	
	 Moldatherin hearthplate supports load and prevents damage due to 	
	spillage	
	 With digital, single setpoint 	
	controller; overtemperature control	
	Inclusions:	
	• 1 unit UPS with built-in AVR	
	(10kVA)	
	 Training on-site for the end-user 	
	framing on site for the chu user	
	With 2-years warranty on parts and	
	service and 1-time preventive	
	maintenance within warranty period	
2.	Supply, Delivery and Installation of	
2.	One (1) Unit Incubator	
	Minimum capacity: 110L or bigger	
	System: Natural convection (Air-jacket	
	system)	
L	- <i>j j</i>	





Temperature Control System: Microprocessor PID system Operating temperature: 5°C above ambient to 80°C.Temperature uniformity: ±1 °C Temperature accuracy: ±0.2 at +37°C Display mode/method: LED Display Operation: Fixed temperature and timer No. of shelves: 2 Outer Door:1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalentOther features: • Automatic timer with delay function 00:00 -99:59• With various alarm system (temperature alarm ±2.5 deviation from set temperature) • With huzzer system in case of temperature overshoot • With key-lock switch • With memory back-up	
 Microprocessor PID system Operating temperature: 5°C above ambient to 80°C. Temperature uniformity: ±1 °C Temperature accuracy: ±0.2 at +37°C Display mode/method: LED Display Operation: Fixed temperature and timer No. of shelves: 2 Outer Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
Operating temperature: 5°C above ambient to 80°C.Temperature uniformity: ±1 °CTemperature accuracy: ±0.2 at +37°CDisplay mode/method: LED Display Operation: Fixed temperature and timer No. of shelves: 2Outer Door:1 Inner Door: 1Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalentOther features: (Emperature alarm ±2.5 deviation from set temperature)With buzzer system in case of temperature overshootWith independent temperature rise prevention system (With key-lock switch	
 ambient to 80°C. Temperature uniformity: ±1 °C Temperature accuracy: ±0.2 at +37°C Display mode/method: LED Display Operation: Fixed temperature and timer No. of shelves: 2 Outer Door:1 Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Temperature uniformity: ±1 °C Temperature accuracy: ±0.2 at +37°C Display mode/method: LED Display Operation: Fixed temperature and timer No. of shelves: 2 Outer Door:1 Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Temperature accuracy: ±0.2 at +37°C Display mode/method: LED Display Operation: Fixed temperature and timer No. of shelves: 2 Outer Door:1 Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
Display mode/method: LED Display Operation: Fixed temperature and timer No. of shelves: 2 Outer Door:1 Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalentOther features: • Automatic timer with delay function 00:00 -99:59• With various alarm system (temperature alarm ±2.5 deviation from set temperature)• With buzzer system in case of temperature overshoot• With independent temperature rise prevention system • With key-lock switch	
Operation: Fixed temperature and timer No. of shelves: 2 Outer Door:1 Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalentOther features: • Automatic timer with delay function 00:00 -99:59 • With various alarm system (temperature alarm ±2.5 deviation from set temperature) • With buzzer system in case of temperature overshoot • With independent temperature rise prevention system • With key-lock switch	
Operation: Fixed temperature and timer No. of shelves: 2 Outer Door:1 Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalentOther features: • Automatic timer with delay function 00:00 -99:59 • With various alarm system (temperature alarm ±2.5 deviation from set temperature) • With buzzer system in case of temperature overshoot • With independent temperature rise prevention system • With key-lock switch	
 No. of shelves: 2 Outer Door:1 Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
Outer Door:1 Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalentOther features: • Automatic timer with delay function 00:00 -99:59• With various alarm system (temperature alarm ±2.5 deviation from set temperature)• With buzzer system in case of temperature overshoot• With independent temperature rise prevention system • With key-lock switch	
 Inner Door: 1 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Insulation material: Glass fiber Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Heater: Nichrome wire heater or better Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Electrical requirement: 220V, 50/60 Hz Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Max. load per shelf: 15 kg Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Type of lamp: LED Lamp Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Powder coated body or equivalent Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Other features: Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 Automatic timer with delay function 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 00:00 -99:59 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 With various alarm system (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 (temperature alarm ±2.5 deviation from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 from set temperature) With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 With buzzer system in case of temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 temperature overshoot With independent temperature rise prevention system With key-lock switch 	
 With independent temperature rise prevention system With key-lock switch 	
prevention systemWith key-lock switch	
With key-lock switch	
• with memory back-up	
Inclusions:	
• 1 unit of 3KVA or compatible UPS	
with built-in AVR	
1 data logger system	
With 2-years warranty on parts and	
service and 1-time preventive	
maintenance within warranty period	
3. Supply, Delivery and Installation of	
Six (6) Units of 54-L Autoclave	
Minimum Capacity: 54L or bigger	
Configuration: Vertical, floor-	
standing	
Sterilization temperature 100-140°C	
Dissolving: 40-99°C	
Warming: 40-60°C	
Usable max. pressure: 0.27MPa	
Sterilization/Dissolving time: 0 min48	
hr 00 min and continuous, warming:	
0min - 48hrs 00 min.	
Chamber and lid material: Stainless	
steel, shiny polished, molded silicon	
rubber lid gasket	
5	
Outer panel material: Steel with baked	
Outer panel material: Steel with baked melamine finish	
Outer panel material: Steel with baked	







	Electrical requirement: 220-240V; 1-	
	phase, 50/60Hz	
	Air exhaust device: temperature	
	(99°adjustable) sensing, time	
	(3minadjustable) control and solenoid	
	valve	
	Safety features:	
	With interlock system	
	Electro mechanical lock system	
	• Double check system of lid closure	
	 Over pressure detector 	
	Over temperature detector	
	Water lock preventor	
	Abnormal time indicator	
	Memory of power failure]	
	• Safety valve, breaker for slight	
	leakage	
	-	
	Over current and short circuit	
	Inclusions (per unit):	
	• 2 pcs stainless wire basket (Can	
	be placed together inside the	
	autoclave; with handle)	
	• 1 pcs exhaust bottle	
	 1 pair autoclave/heat-resistant 	
	gloves	
	• 1 unit 10kVA or compatible UPS	
	with built-in AVR	
	With 2-years warranty on parts and	
	service and 1-time preventive	
	maintenance within warranty period	
4.	Supply, Delivery and Installation of Two	
	(2) Units of Drying Oven	
	Technical specifications:	
	Minimum capacity: at least 774L	
	Maximum capacity: 1000L	
	Dimension: Max height of 6 ft.	
	Temperature range: 50 to 250°C or	
	better	
	Adjustable shelves: Yes	
	Mode of heating: Convection	
	Maximum temperature reaching	
	time: ~60 min	
	Circulation mode: forced air	
	circulation	
	Temperature control: Microprocessor	
	control with vacuum fluorescent display	
	Temperature stability: ±0.5°C;	
	Electrical requirements: 220V 50/60Hz	
	Other features:	
	• Automatic over-temperature alarm	
	system	
1	Low overall energy consumption	
	Low overall energy consumptionBuilt in timer	







	· · · · · · · · · · · · · · · · · · ·	
	Corrosion-resistant stainless-steel	
	chambers with rounded corners	
	Large and easy to read vacuum	
	fluorescent display	
	Easy to use microprocessor-	
	controlled touch button operation	
	• Doors can be opened over 180°C	
	Inclusions:	
	• 5 shelves compatible with the unit	
	• 1 unit 3kVA or compatible UPS with built-in AVR	
	With 2-years warranty on parts and	
	service and 1-time preventive	
	maintenance within warranty period	<u> </u>
	EVIDENCE	
	Brochure and complete technical	
	specifications [SEPARATE	
	DOCUMENT (use your company	
	letterhead) indicating ALL the	
	technical specifications you are offering but not limited to Brand,	
	Model, Place of Origin, Features,	
	Inclusions, Warranty, and	
	Installation (if applicable)] of the	
	item being offered.	
	item being onered.	
	Certificate as authorized distributor	
	or exclusive dealer coming from the	
	principal.	
	Certificate of training of service	
	engineers/technicians authorized to	
	conduct after sales service issued by	
	the principal supplier/brand being	
	offered.	
	• The supplier shall declare through a	
	written statement that the product	
	being offered is/are repairable and	
	that replacement parts are available	
	for a minimum of five (5) years for	
	item nos. 1, 2 & 4 and ten (10)	
	years for item no. 3 after end of	
	production.	
	• For all items with "or equivalent",	
	please indicate the equivalent	
	offer as well as its advantages	
	which must be supported by	
	evidence.	
L		

