

TECHNICAL SPECIFICATIONS

Unit	Item Description	Quantity	Approved Budget
units	<b>Hotplate</b>	1	40,000.00
	ceramic top		
	temperature upto 540 degC		
	heating surface 2 x 2'		
	220 V, 60 Hz		
	digital display		
	must be rusted/robust brand		
	one year warranty on parts and labor		
	Provide picture of equipment in bid docs, preferably colored		
units	<b>Stir/Hot Plate</b>	1	40,000.00
	ceramic top		
	temperature upto 540 degC		
	stirring capacity up to 1200 mm		
	heating surface 5' x 3'		
	220 V, 60 Hz		
	digital display		
	with free air bar, 1-2inch		
	must be rusted/robust brand		
	one year warranty on parts and labor		
	Provide picture of equipment in bid docs, preferably colored		
units	<b>Convection oven</b>	10	500,000.00
	9 cu ft		
	Temp 20-500 °C		
	Has 1 zone		
	UL component		
	Temp uniformity ±2 °C at 160°C		
	Temp control accuracy ±0.1 °C up to 99°C, ±0.5°C above 100°C		
	No. of shelves: 2-3		
	Power: 250W		
	With 1-2 years warranty		
units	<b>S Soxhlet extraction apparatus</b>	1	150,000.00
	A range of applications: food, feed, fuel and other samples		
	With 3 bubble washers (single or double glass)		
	Adjustable extraction time with time alarm		
	Extraction solvent can be recovered immediately		
	Voltage: 220V ~ 110V Frequency of 50/60Hz		
	Electric power: 300W		
units	<b>Furnace</b>	1	300,000.00
	1500°C Compact Tube Furnace (2" O.D. ) with Complete accessories-GES-6000-04011		
	<b>Furnace Structure:</b> Double layer steel casing with two air cooling fans. High purity fiber alumina board chamber for the best energy saving.		
	<b>Power:</b> 2.5 KW Max. (20A breaker required)		
	<b>Voltage Single Phase:</b> 208-240V AC, 50/60 Hz		
	<b>Alumina Process tube:</b>		
	• 99.9% High Purity Alumina processing tube		
	• 2" (50.8mm) O.D. x 1.65" (42mm) I.D. x 27.6" (700 mm) Length.		
	• Two fibron ceramic tube blocks are included for blocking heat radiation from inside tube. (Ceramic blocks must be fully inserted into the furnace chamber before heating)		
	<b>Vacuum Flange:</b>		
	• One pair of SS 304 vacuum flange with double high-temperature silicone O-ring is included		
	• Two needle valves with 1/4" pipe adapter are installed with flange		
	• 2" deulok flange with 1/4" Barl fittings, 1/4" tube feedthrough port (for 1/4" O.D thermocouple insert) and a KF25 vacuum port (click bottom right picture to see details.)		
	• One Vacuum pressure gauge is installed one side flange		
	• Vacuum level can reach 10-2 torr by a quality mechanical vacuum pump and 10-5 torr by a molecular pump.		
	<b>Pressure Measurement / Monitoring:</b>		
	• Mechanical Vacuum Gauge (included as standard accessory) which measures within a pressure range of -0.1 to 0.15Mpa		
	<b>Working Temperature:</b>		
	• 1500 °C short time (less than 60 mins); 1400 °C Continuous		
	<b>Temperature Controller:</b>		
	• FA-YD518P-AG temperature controller is included		
	• Proportional-integral-derivative control (PID control) and auto-tune function		
	• 30 segments programmed with ramping, cooling and dwelling steps		
	• Built-in over-temperature alarm and thermocouple failure alarm		
	• ± 0.1 °C temperature control accuracy		
	• Detail 180 °C communication port		
	• MET Certified		
	<b>Recommended Heating Rate:</b>		
	• 10°C / min (R1-1000°C)		
	• 5°C / min (1000°C-1500°C)		
	<b>Heating Zone:</b>		
	• Heating Zone Length: 6" (152 mm)		
	• Constant Temperature Zone: 80 mm		
	• Temperature Accuracy: ± 0.1°C		
	<b>Heating Element:</b> 1600°C grade SiC rods, 4 pcs		
	Dimension: 400 x 300 x 530 mm (15.7" x 12" x 21")		
	<b>Net Weight:</b> 68 kg (150 lbs)		
units	<b>Funchood</b>	2	500,000.00
	Ducted, benchtop		
	Interior dimensions (W x H) 47"		
	Exterior Dimensions (W x H) 47"		
	Exterior Dimensions (W x H) 48"		
	Exterior Dimensions (W x H) 25"		
	Flowrate: 1.3		
	Power (HHP): 60		
	Power (VAC): 115		
	0.5 cm thick tempered safety glass counterbalanced sash		
	With 10" (25.4 cm) diameter, 5 m length duct collar		
	With built in duct and bottom cabinet		
	Insulation free included		
	With 1 year warranty		
units	<b>Large Capacity Mixer</b>	2	100,000.00
	10 quart capacity bowl		
	Includes attachments (dough hook and wire whip)		
	With wire bowl guard		
	With stainless steel motor bowl		
units	<b>Ultra-low Freezer</b>	1	600,000.00
	Style: Chest Type		
	Capacity: 80 to 120		
	Temp. Range: -20 °C to -46 °C		
	LED Display		
	With Alarm		
	Power Supply: 230V		
unit	<b>Revolving Chiller</b>	1	250,000.00
	Temperature range: -10 to 25 degC		
	Working range: -5 to 25 degC		
	Temperature stability: ± 0.5 degC		
	Refrigerant: R134a		
	Tank volume: 1 L		
	Temperature stability: 1 L1		
	Temperature control: PID		
	Flow rate: 4.0 ml/min, 2.5		
	Pump capacity flow pressure (bar): 0.6		
	Pump connection: M10x1 male		
	Hose connection: 8 mm		
	Weight (kg): 3.0		
	Power Consumption: 850 W		
	Voltage: 230V		
	Frequency: 50/60 Hz		
	Coverage category: II		
	With fill level indicator		
	Stainless steel fill and drainage		
	Reliable trusted brand		
	One year warranty on parts and labor		
	Provide picture of equipment in bid docs, preferably colored		
units	<b>Portable Flaked Ice Maker</b>	1	250,000.00
	Capacity at least 60 kg/24hr		
	Ice storage at least 24kg		
	With ice scoop		
	Refrigerant: R134a		
	Voltage: 220V, 50 Hz		
	Power: at most 450W		
	Freeze tanking		
	Condenser unit air-cooled		
	Electric and mechanical		
	With ice full display		
	With water shortage display		
	With remote failure		
	Reliable trusted brand		
	With AVR		
	One year warranty on parts and labor		
	Price condition of unit		
	Provide picture of equipment in bid docs, preferably colored		
	TOTAL		2,738,900.00