

✓ STABILITY CHAMBER

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK										
1	SURROUNDING SPACE	FRONT SIDE:- MINIMUM 1000 TO 1200 MM FOR DOOR OPENING AREA LH SIDE:- MINIMUM 100 MM RH SIDE:- MINIMUM 100 MM, BACK SIDE:- MINIMUM 600 MM FOR SERVICE AREA / MAINTENANCE TOP SIDE:- MINIMUM 500 MM REQUIRED FOR MAINTENANCE	MENTIONED SPACE SHOULD BE PROVIDED FOR EASE OF MAINTENANCE & WORKING OF MACHINE.										
2	ENVIRONMENTAL TEMPERATURE OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVE AIR CONDITION OR AHU.	REQUIRE TEMPERATURE 25°C TO 30°C										
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>STABILITY CHAMBER CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>90 LITER to 227 LITER</td><td>2.1 KW</td></tr><tr><td>325 LITER to 500 LITER</td><td>2.6 KW</td></tr><tr><td>600 LITER to 1000 LITER</td><td>3.5 KW</td></tr></table> 16 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	1Ø, 220 VAC, 50 HZ,		STABILITY CHAMBER CAPACITY	CONNECTED LOAD	90 LITER to 227 LITER	2.1 KW	325 LITER to 500 LITER	2.6 KW	600 LITER to 1000 LITER	3.5 KW	220 VAC, 50HZ WITH PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,													
STABILITY CHAMBER CAPACITY	CONNECTED LOAD												
90 LITER to 227 LITER	2.1 KW												
325 LITER to 500 LITER	2.6 KW												
600 LITER to 1000 LITER	3.5 KW												
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	TO BE REQUIRED THE UPS POWER & LAN CONNECTION IF THE EQUIPMENT IS PLC BASED OR HAVING DATA STORAGE UNIT										
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER AT TOP SIDE	(220 VAC WITH PHASE, NEUTRAL & EARTHING)										
6	WATER SUPPLY	CONTINUOUS WATER (< 100 TDS) WITH GRAVITY PRESSURE CONNECTION TO BE PROVIDED WITH SHUTOFF VALVE UPTO THE HUMIDITY TANK AT BACK SIDE OF CHAMBER.	MANUAL WATER FILLING IS NOT RECOMMENDED										
7	DRAIN CONNECTION	DRAINAGE TO BE PROVIDED IN SERVICE AREA AT FLOORING LEVEL	EQUIPMENT’S DRAIN POINT IS AVAILABLE AT BOTTOM OF CHAMBER AND 75 TO 100 MM UP SIDE FROM FLOORING										

✓ BOD INCUBATOR

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK										
1	SURROUNDING SPACE	FRONT SIDE:- MINIMUM 1000 TO 1200 MM FOR DOOR OPENING AREA LH SIDE:- MINIMUM 100 MM RH SIDE:- MINIMUM 100 MM, BACK SIDE:- MINIMUM 300 MM TOP SIDE:- MINIMUM 500 MM REQUIRED FOR MAINTENANCE	MENTIONED SPACE SHOULD BE PROVIDED FOR EASE OF MAINTENANCE & WORKING OF MACHINE.										
2	ENVIORMENTAL TEMPERATURE OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVING AIR CONDITION OR AHU.	REQUIRE TEMPERATURE 25°C TO 30°C										
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>BOD INCUBATOR CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>90 LITER to 227 LITER</td><td>1.1 KW</td></tr><tr><td>325 LITER to 500 LITER</td><td>1.4 KW</td></tr><tr><td>600 LITER to 1000 LITER</td><td>2.3 KW</td></tr></table> 16 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	1Ø, 220 VAC, 50 HZ,		BOD INCUBATOR CAPACITY	CONNECTED LOAD	90 LITER to 227 LITER	1.1 KW	325 LITER to 500 LITER	1.4 KW	600 LITER to 1000 LITER	2.3 KW	220 VAC, 50HZ WITH PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,													
BOD INCUBATOR CAPACITY	CONNECTED LOAD												
90 LITER to 227 LITER	1.1 KW												
325 LITER to 500 LITER	1.4 KW												
600 LITER to 1000 LITER	2.3 KW												
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	TO BE REQUIRED THE UPS POWER & LAN CONNECTION IF THE EQUIPMENT IS PLC BASED OR HAVING DATA STORAGE UNIT										
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER AT TOP SIDE	(220 VAC WITH PHASE, NEUTRAL & EARTHING)										
6	DRAIN CONNECTION	DRAINAGE TO BE PROVIDED IN SERVICE AREA AT FLOORING LEVEL	EQUIPMENT’S DRAIN POINT IS AVAILBLE AT BOTTOM OF CHAMBER AND 75 TO 100 MM UP SIDE FROM FLOORING										

✓ COLD CHAMBER

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK								
1	SURROUNDING SPACE	FRONT SIDE:- MINIMUM 1000 TO 1200 MM FOR DOOR OPENING AREA LH SIDE:- MINIMUM 100 MM RH SIDE:- MINIMUM 100 MM, BACK SIDE:- MINIMUM 300 MM TOP SIDE:- MINIMUM 500 MM REQUIRED FOR MAINTENANCE	MENTIONED SPACE SHOULD BE PROVIDED FOR EASE OF MAINTENANCE & WORKING OF MACHINE.								
2	ENVIORMENTAL TEMPERATURE OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVING AIR CONDITION OR AHU.	REQUIRE TEMPERATURE 25°C TO 30°C								
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>COLD CHAMBER CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>90 LITER to 500 LITER</td><td>0.8 KW</td></tr><tr><td>600 LITER to 1000 LITER</td><td>1 KW</td></tr></table> 16 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	1Ø, 220 VAC, 50 HZ,		COLD CHAMBER CAPACITY	CONNECTED LOAD	90 LITER to 500 LITER	0.8 KW	600 LITER to 1000 LITER	1 KW	220 VAC, 50HZ WITH PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,											
COLD CHAMBER CAPACITY	CONNECTED LOAD										
90 LITER to 500 LITER	0.8 KW										
600 LITER to 1000 LITER	1 KW										
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	TO BE REQUIRED THE UPS POWER & LAN CONNECTION IF THE EQUIPMENT IS PLC BASED OR HAVING DATA STORAGE UNIT								
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER AT TOP SIDE	(220 VAC WITH PHASE, NEUTRAL & EARTHING)								
6	DRAIN CONNECTION	DRAINAGE TO BE PROVIDED IN SERVICE AREA AT FLOORING LEVEL	EQUIPMENT’S DRAIN POINT IS AVAILBLE AT BOTTOM OF CHAMBER AND 75 TO 100 MM UP SIDE FROM FLOORING								

✓ DEEP FREEZER (-15 TO -40°C)

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION		REMARK
1	SURROUNDING SPACE	FRONT SIDE:- MINIMUM 1000 TO 1200 MM FOR DOOR OPENING AREA LH SIDE:- MINIMUM 200 MM RH SIDE:- MINIMUM 200 MM, BACK SIDE:- MINIMUM 300 MM TOP SIDE:- MINIMUM 500 MM REQUIRED FOR MAINTENANCE		MENTIONED SPACE SHOULD BE PROVIDED FOR EASE OF MAINTENANCE & WORKING OF MACHINE.
2	ENVIRONMENTAL TEMPERATURE OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVE AIR CONDITION OR AHU.		REQUIRE TEMPERATURE 25°C TO 30°C
3	POWER SUPPLY FOR LOAD	1Ø, 220 VAC, 50 HZ,		220 VAC, 50HZ WITH PHASE, NEUTRAL & EARTHING
		DEEP FREEZER CAPACITY	CONNECTED LOAD	
		100 LITER & 200 LITER	1 KW	
		325 LITER & 400 LITER	1.5 KW	
		500 LITER & 600 LITER	1.8 KW	
		800 LITER & 1000 LITER	2 KW	
16 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER				
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER		TO BE REQUIRED THE UPS POWER & LAN CONNECTION IF THE EQUIPMENT IS PLC BASED OR HAVING DATA STORAGE UNIT (220 VAC WITH PHASE, NEUTRAL & EARTHING)
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER AT TOP SIDE		
6	DRAIN CONNECTION	DRAINAGE TO BE PROVIDED IN SERVICE AREA AT FLOORING LEVEL		EQUIPMENT'S DRAIN POINT IS AVAILABLE AT BOTTOM OF CHAMBER AND 75 TO 100 MM UP SIDE FROM FLOORING

✓ ULTRA LOW TEMP. FREEZER (-50 TO -80°C)

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK												
1	SURROUNDING SPACE	FRONT SIDE:- MINIMUM 1000 TO 1200 MM FOR DOOR OPENING AREA LH SIDE:- MINIMUM 200 MM RH SIDE:- MINIMUM 200 MM, BACK SIDE:- MINIMUM 300 MM TOP SIDE:- MINIMUM 500 MM REQUIRED FOR MAINTENANCE	MENTIONED SPACE SHOULD BE PROVIDED FOR EASE OF MAINTENANCE & WORKING OF MACHINE.												
2	ENVIRONMENTAL TEMPERATURE OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVE AIR CONDITION OR AHU.	REQUIRE TEMPERATURE 25°C TO 30°C												
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>DEEP FREEZER CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>100 LITER & 200 LITER</td><td>1.5 KW</td></tr><tr><td>325 LITER & 400 LITER</td><td>1.8 KW</td></tr><tr><td>500 LITER & 600 LITER</td><td>2.2 KW</td></tr><tr><td>800 LITER & 1000 LITER</td><td>2.5 KW</td></tr></table> 16 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	1Ø, 220 VAC, 50 HZ,		DEEP FREEZER CAPACITY	CONNECTED LOAD	100 LITER & 200 LITER	1.5 KW	325 LITER & 400 LITER	1.8 KW	500 LITER & 600 LITER	2.2 KW	800 LITER & 1000 LITER	2.5 KW	220 VAC, 50HZ WITH PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,															
DEEP FREEZER CAPACITY	CONNECTED LOAD														
100 LITER & 200 LITER	1.5 KW														
325 LITER & 400 LITER	1.8 KW														
500 LITER & 600 LITER	2.2 KW														
800 LITER & 1000 LITER	2.5 KW														
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	TO BE REQUIRED THE UPS POWER & LAN CONNECTION IF THE EQUIPMENT IS PLC BASED OR HAVING DATA STORAGE UNIT												
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UP TO THE CONTROL PANEL OF CHAMBER AT TOP SIDE	(220 VAC WITH PHASE, NEUTRAL & EARTHING)												
6	DRAIN CONNECTION	DRAINAGE TO BE PROVIDED IN SERVICE AREA AT FLOORING LEVEL	EQUIPMENT’S DRAIN POINT IS AVAILABLE AT BOTTOM OF CHAMBER AND 75 TO 100 MM UP SIDE FROM FLOORING												

✓ BACTERIOLOGICAL INCUBATOR

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK								
1	SURROUNDING SPACE	FRONT SIDE:- MINIMUM 1000 TO 1200 MM FOR DOOR OPENING AREA LH SIDE:- MINIMUM 100 MM RH SIDE:- MINIMUM 100 MM, BACK SIDE:- MINIMUM 300 MM TOP SIDE:- MINIMUM 500 MM REQUIRED FOR MAINTENANCE	MENTIONED SPACE SHOULD BE PROVIDED FOR EASE OF MAINTENANCE & WORKING OF MACHINE.								
2	ENVIRONMENTAL TEMPERATURE OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVE AIR CONDITION OR AHU.	REQUIRE TEMPERATURE 25°C TO 30°C								
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>BACTERIOLOGICAL INCUBATOR CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>90 LITER to 325 LITER</td><td>0.25 KW</td></tr><tr><td>400 LITER to 1000 LITER</td><td>0.5 KW</td></tr></table> 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	1Ø, 220 VAC, 50 HZ,		BACTERIOLOGICAL INCUBATOR CAPACITY	CONNECTED LOAD	90 LITER to 325 LITER	0.25 KW	400 LITER to 1000 LITER	0.5 KW	220 VAC WITH PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,											
BACTERIOLOGICAL INCUBATOR CAPACITY	CONNECTED LOAD										
90 LITER to 325 LITER	0.25 KW										
400 LITER to 1000 LITER	0.5 KW										
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	TO BE REQUIRED THE UPS POWER & LAN CONNECTION IF THE EQUIPMENT IS PLC BASED OR HAVING DATA STORAGE UNIT								
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UP TO THE CONTROL PANEL OF CHAMBER AT TOP SIDE	(220 VAC WITH PHASE, NEUTRAL & EARTHING)								

✓ HOT AIR OVEN

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK																		
1	SURROUNDING SPACE	FRONT SIDE:- MINIMUM 1000 TO 1200 MM FOR DOOR OPENING AREA LH SIDE:- MINIMUM 200 MM RH SIDE:- MINIMUM 100 MM, BACK SIDE:- MINIMUM 300 MM TOP SIDE:- MINIMUM 500 MM REQUIRED FOR MAINTENANCE	MENTIONED SPACE SHOULD BE PROVIDED FOR EASE OF MAINTENANCE & WORKING OF MACHINE.																		
2	ENVIRONMENTAL TEMPERATURE OF INSTALLATION AREA	RECOMMENDED TEMPERATURE 25°C TO 30°C OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVE PROPER VENTILATION.																		
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>HOT AIR OVEN CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>90 LITER & 120 LITER</td><td>1.5 KW</td></tr><tr><td>200 LITER</td><td>2 KW</td></tr><tr><td>325 LITER & 400 LITER</td><td>2.5 KW</td></tr><tr><td>500 LITER & 600 LITER</td><td>3 KW</td></tr></table> 16 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF OVEN <table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>HOT AIR OVEN CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>800 LITER & 1000 LITER</td><td>5 KW</td></tr></table> 32 AMP, 2 POLE MCB TO BE PROVIDED BEHIND OF OVEN	1Ø, 220 VAC, 50 HZ,		HOT AIR OVEN CAPACITY	CONNECTED LOAD	90 LITER & 120 LITER	1.5 KW	200 LITER	2 KW	325 LITER & 400 LITER	2.5 KW	500 LITER & 600 LITER	3 KW	1Ø, 220 VAC, 50 HZ,		HOT AIR OVEN CAPACITY	CONNECTED LOAD	800 LITER & 1000 LITER	5 KW	220 VAC WITH PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,																					
HOT AIR OVEN CAPACITY	CONNECTED LOAD																				
90 LITER & 120 LITER	1.5 KW																				
200 LITER	2 KW																				
325 LITER & 400 LITER	2.5 KW																				
500 LITER & 600 LITER	3 KW																				
1Ø, 220 VAC, 50 HZ,																					
HOT AIR OVEN CAPACITY	CONNECTED LOAD																				
800 LITER & 1000 LITER	5 KW																				
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	TO BE REQUIRED THE UPS POWER & LAN CONNECTION IF THE EQUIPMENT IS PLC BASED OR HAVING DATA STORAGE UNIT																		
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER AT TOP SIDE	(220 VAC WITH PHASE, NEUTRAL & EARTHING)																		

✓ AUTOCLAVE

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK																												
1	INSTALLATION AREA	SUFFICIENT SPACE REQUIRE AROUND THE AUTOCLAVE FOR UTILITY CONNECTION, OPERATION & MAINTENANCE PURPOSE	INSTALLATION AREA SHOULD HAVING PROPER VENTILATION TO EXHAUST THE AUTOCLAVE STEAM																												
2	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>AUTOCLAVE CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>22 LITER</td><td>2 KW</td></tr><tr><td>35 LITER</td><td>2.5 KW</td></tr><tr><td>52 LITER</td><td>3 KW</td></tr></table> <p>16 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF OVEN</p> <table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>AUTOCLAVE CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>75 LITER</td><td>4 KW</td></tr><tr><td>100 LITER</td><td>4.5 KW</td></tr><tr><td>110 LITER</td><td>4.5 KW</td></tr><tr><td>120 LITER</td><td>5 KW</td></tr><tr><td>150 LITER</td><td>6 KW</td></tr><tr><td>180 LITER</td><td>7 KW</td></tr><tr><td>215 LITER</td><td>8 KW</td></tr></table> <p>32 AMP, 2 POLE MCB TO BE PROVIDED BEHIND OF OVEN</p>	1Ø, 220 VAC, 50 HZ,		AUTOCLAVE CAPACITY	CONNECTED LOAD	22 LITER	2 KW	35 LITER	2.5 KW	52 LITER	3 KW	1Ø, 220 VAC, 50 HZ,		AUTOCLAVE CAPACITY	CONNECTED LOAD	75 LITER	4 KW	100 LITER	4.5 KW	110 LITER	4.5 KW	120 LITER	5 KW	150 LITER	6 KW	180 LITER	7 KW	215 LITER	8 KW	220 VAC WITH PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,																															
AUTOCLAVE CAPACITY	CONNECTED LOAD																														
22 LITER	2 KW																														
35 LITER	2.5 KW																														
52 LITER	3 KW																														
1Ø, 220 VAC, 50 HZ,																															
AUTOCLAVE CAPACITY	CONNECTED LOAD																														
75 LITER	4 KW																														
100 LITER	4.5 KW																														
110 LITER	4.5 KW																														
120 LITER	5 KW																														
150 LITER	6 KW																														
180 LITER	7 KW																														
215 LITER	8 KW																														
3	WATER SUPPLY	REQUIRE WATER < 100 TDS	TO BE FILLED THE WATER MANUALLY UPTO THE WATER LEVEL SWITCH																												
4	EQUIPMENT & SOFTWARE COMMUNICATION	0.25 SQMM 3 CORE SHIELDED CABLE HAS TO BE LAID FROM AUTOCLAVE TO PC FOR SOFTWARE COMMUNICATION																													
5	DRAIN CONNECTION	DRAINAGE SHOULD AVAILABLE IN THE INSTALLATION AREA	EQUIPMENT’S DRAIN POINT IS AVAILBLE AT BOTTOM TO DRAIN OUT THE WATER OF AUTOCLAVE																												

✓ VACUUM OVEN

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK														
1	SURROUNDING SPACE	FRONT SIDE:- MINIMUM 1000 MM FOR DOOR OPENING AREA LH SIDE:- MINIMUM 200 MM RH SIDE:- MINIMUM 200 MM, BACK SIDE:- MINIMUM 300 MM TOP SIDE:- MINIMUM 500 MM REQUIRED FOR MAINTENANCE	MENTIONED SPACE SHOULD BE PROVIDED FOR EASE OF MAINTENANCE & WORKING OF MACHINE.														
2	ENVIORMENTAL TEMPERATURE OF INSTALLATION AREA	RECOMMENDED TEMPERATURE 25°C TO 30°C OF INSTALLATION ARE	INSTALLATION AREA SHOULD HAVING PROPER VETILATION.														
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>VACUUM OVEN CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>9" X 12"</td><td>0.5 KW</td></tr><tr><td>12" X 12" X 12"</td><td>1 KW</td></tr><tr><td>12" X 15"</td><td>1 KW</td></tr><tr><td>15" X 18"</td><td>1.6 KW</td></tr><tr><td>20" X 20" X 21"</td><td>2.5 KW</td></tr></table> 16 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF OVEN	1Ø, 220 VAC, 50 HZ,		VACUUM OVEN CAPACITY	CONNECTED LOAD	9" X 12"	0.5 KW	12" X 12" X 12"	1 KW	12" X 15"	1 KW	15" X 18"	1.6 KW	20" X 20" X 21"	2.5 KW	220 VAC WITH PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,																	
VACUUM OVEN CAPACITY	CONNECTED LOAD																
9" X 12"	0.5 KW																
12" X 12" X 12"	1 KW																
12" X 15"	1 KW																
15" X 18"	1.6 KW																
20" X 20" X 21"	2.5 KW																
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	TO BE REQUIRED THE UPS POWER & LAN CONNECTION IF THE EQUIPMENT IS PLC BASED OR HAVING DATA STORAGE UNIT														
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER AT TOP SIDE	(220 VAC WITH PHASE, NEUTRAL & EARTHING)														

✓ MUFFLE FURNACE

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK																				
1	SURROUNDING SPACE	FRONT SIDE:- MINIMUM 600 TO 1000 MM FOR DOOR OPENING AREA LH SIDE:- MINIMUM 200 MM RH SIDE:- MINIMUM 200 MM, BACK SIDE:- MINIMUM 300 MM TOP SIDE:- MINIMUM 500 MM REQUIRED FOR MAINTENANCE	MENTIONED SPACE SHOULD BE PROVIDED FOR EASE OF MAINTENANCE & WORKING OF MACHINE.																				
2	ENVIRONMENTAL TEMPERATURE OF INSTALLATION AREA	RECOMMENDED TEMPERATURE 25°C TO 30°C OF INSTALLATION ARE	INSTALLATION AREA SHOULD HAVE PROPER VENTILATION.																				
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>MUFFLE FURNACE CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>4" X 4" X 9" (2.3 LITER)</td><td>2 KW</td></tr><tr><td>5" X 5" X 10" (4.25 LITER)</td><td>2.5 KW</td></tr><tr><td>6" X 6" X 12" (6.75 LITER)</td><td>3 KW</td></tr></table> <p>16 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED FOR POWER SUPPLY</p> <table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>MUFFLE FURNACE CAPACITY</td><td>CONNECTED LOAD</td></tr><tr><td>8" X 8" X 16" (12 LITER)</td><td>4.5 KW</td></tr><tr><td>9" X 9" X 18" (23.8 LITER)</td><td>7 KW</td></tr><tr><td>12" X 12" X 12" (28.25 LITER)</td><td>7 KW</td></tr></table> <p>32 AMP, 2 POLE MCB TO BE PROVIDED BEHIND OF OVEN</p>	1Ø, 220 VAC, 50 HZ,		MUFFLE FURNACE CAPACITY	CONNECTED LOAD	4" X 4" X 9" (2.3 LITER)	2 KW	5" X 5" X 10" (4.25 LITER)	2.5 KW	6" X 6" X 12" (6.75 LITER)	3 KW	1Ø, 220 VAC, 50 HZ,		MUFFLE FURNACE CAPACITY	CONNECTED LOAD	8" X 8" X 16" (12 LITER)	4.5 KW	9" X 9" X 18" (23.8 LITER)	7 KW	12" X 12" X 12" (28.25 LITER)	7 KW	SINGLE PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,																							
MUFFLE FURNACE CAPACITY	CONNECTED LOAD																						
4" X 4" X 9" (2.3 LITER)	2 KW																						
5" X 5" X 10" (4.25 LITER)	2.5 KW																						
6" X 6" X 12" (6.75 LITER)	3 KW																						
1Ø, 220 VAC, 50 HZ,																							
MUFFLE FURNACE CAPACITY	CONNECTED LOAD																						
8" X 8" X 16" (12 LITER)	4.5 KW																						
9" X 9" X 18" (23.8 LITER)	7 KW																						
12" X 12" X 12" (28.25 LITER)	7 KW																						
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 6 AMP POWER PLUG (SWITCH + SOCKET) TO BE PROVIDED BEHIND OF CHAMBER	TO BE REQUIRED THE UPS POWER & LAN CONNECTION IF THE EQUIPMENT IS PLC BASED OR HAVING DATA STORAGE UNIT																				
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER AT TOP SIDE	(220 VAC WITH PHASE, NEUTRAL & EARTHING)																				

✓ WALK IN STABILITY CHAMBER

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION		REMARK						
1	SURROUNDING SPACE	AS PER PRE-APPROVED DRAWING		FLOORING SHOULD BE AVAILABLE WITH ZERO LEVEL & PLANE SURFACE FOR PROPER INSTALLATION OF ROOM						
2	ENVIRONMENTAL TEMPERATURE OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVE AIR CONDITION OR AHU.		REQUIRE TEMPERATURE 25°C TO 30°C						
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>CAPACITY IN LITER</td><td>CONNECTED LOAD</td></tr><tr><td>8000 LITER</td><td>3 KW</td></tr></table> 2.5 SQMM 3 CORE CABLE TO BE PROVIDED IN CONTROL PANEL OF CHAMBER,		1Ø, 220 VAC, 50 HZ,		CAPACITY IN LITER	CONNECTED LOAD	8000 LITER	3 KW	SINGLE PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,										
CAPACITY IN LITER	CONNECTED LOAD									
8000 LITER	3 KW									
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 1 SQMM 3 CORE CABLE TO BE PROVIDED IN CONTROL PANEL OF CHAMBER								
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER								
6	WATER SUPPLY	CONTINUOUS WATER (< 100 TDS) WITH GRAVITY PRESSURE CONNECTION TO BE PROVIDED WITH SHUTOFF VALVE UPTO THE HUMIDITY SYSTEM INSIDE THE CHAMBER		MANUAL WATER FILLING IS NOT RECOMMENDED						
7	DRAIN CONNECTION	DRAINAGE TO BE PROVIDED IN SERVICE AREA AT GROUND LEVEL AND DRAIN PIPING UPTO THE DRAIN POINT OF CHAMBER								
8	OTHER REQUIREMENTS	1. TO BE PROVIDED ANY CUTOUTS OR HOLES IN THE WALL OR SLAB IF NEEDED FOR LAYING THE REFRIGERATION PIPING DURING INSTALLATION. 2. 25 FEET PIPING/REFRIGERATION SYSTEMS (i.e. TOTAL 50 FEET PIPING/CHAMBER) TO BE PROVIDED BY KESAR; MORE THAN 25 FEET WILL BE CHARGED EXTRA.								

✓ WALK IN COLD CHAMBER

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK						
1	SURROUNDING SPACE FOR INSTALLATION	AS PER PRE-APPROVED DRAWING	FLOORING SHOULD BE AVAILABLE WITH ZERO LEVEL & PLANE SURFACE FOR PROPER INSTALLATION OF ROOM						
2	ENVIORMENTAL TEMPERATURE OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVING AIR CONDITION OR AHU.	REQUIRE TEMPERATURE 25°C TO 30°C						
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>CAPACITY IN LITER</td><td>CONNECTED LOAD</td></tr><tr><td>8000 LITER</td><td>3 KW</td></tr></table> 2.5 SQMM 3 CORE CABLE TO BE PROVIDED IN CONTROL PANEL OF CHAMBER,	1Ø, 220 VAC, 50 HZ,		CAPACITY IN LITER	CONNECTED LOAD	8000 LITER	3 KW	SINGLE PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,									
CAPACITY IN LITER	CONNECTED LOAD								
8000 LITER	3 KW								
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 1 SQMM 3 CORE CABLE TO BE PROVIDED IN CONTROL PANEL OF CHAMBER							
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER							
6	DRAIN CONNECTION	DRAINAGE TO BE PROVIDED IN SERVICE AREA AT GROUND LEVEL AND DRAIN PIPING UPTO THE DRAIN POINT OF CHAMBER							
7	OTHER REQUIREMENTS	1. TO BE PROVIDED ANY CUTOUTS OR HOLES IN THE WALL OR SLAB IF NEEDED FOR LAYING THE REFRIGERATION PIPING DURING INSTALLATION. 2. 25 FEET PIPING/REFRIGERATION SYSTEMS (i.e. TOTAL 50 FEET PIPING/CHAMBER) TO BE PROVIDED BY KESAR; MORE THAN 25 FEET WILL BE CHARGED EXTRA.							

✓ WALK IN BOD INCUBATOR

PRE-REQUIREMENTS OF INSTALLATION (CLIENT SCOPE)

NO.	PRE-REQUIREMENTS	SPECIFICATION	REMARK						
1	SURROUNDING SPACE FOR INSTALLATION	AS PER PRE-APPROVED DRAWING	FLOORING SHOULD BE AVAILABLE WITH ZERO LEVEL & PLANE SURFACE FOR PROPER INSTALLATION OF ROOM						
2	ENVIORMENTAL TEMPERATURE OF INSTALLATION AREA	INSTALLATION AREA SHOULD HAVING AIR CONDITION OR AHU.	REQUIRE TEMPERATURE 25°C TO 30°C						
3	POWER SUPPLY FOR LOAD	<table><tr><td colspan="2">1Ø, 220 VAC, 50 HZ,</td></tr><tr><td>CAPACITY IN LITER</td><td>CONNECTED LOAD</td></tr><tr><td>8000 LITER</td><td>3 KW</td></tr></table> 2.5 SQMM 3 CORE CABLE TO BE PROVIDED IN CONTROL PANEL OF CHAMBER,	1Ø, 220 VAC, 50 HZ,		CAPACITY IN LITER	CONNECTED LOAD	8000 LITER	3 KW	SINGLE PHASE, NEUTRAL & EARTHING
1Ø, 220 VAC, 50 HZ,									
CAPACITY IN LITER	CONNECTED LOAD								
8000 LITER	3 KW								
4	UPS POWER SUPPLY FOR CONTROL & DISPLAY PANEL	1Ø, 220 VAC, 50 HZ, 1/2KVA 1 SQMM 3 CORE CABLE TO BE PROVIDED IN CONTROL PANEL OF CHAMBER							
5	LAN CONNECTION FOR EQUIPMENT & SOFTWARE COMMUNICATION	LAN CONNECTION WITH CAT-6 NETWORK CABLE TO BE PROVIDED UPTO THE CONTROL PANEL OF CHAMBER							
6	DRAIN CONNECTION	DRAINAGE TO BE PROVIDED IN SERVICE AREA AT GROUND LEVEL AND DRAIN PIPING UPTO THE DRAIN POINT OF CHAMBER							
7	OTHER REQUIREMENTS	1. TO BE PROVIDED ANY CUTOUTS OR HOLES IN THE WALL OR SLAB IF NEEDED FOR LAYING THE REFRIGERATION PIPING DURING INSTALLATION. 2. 25 FEET PIPING/REFRIGERATION SYSTEMS (i.e. TOTAL 50 FEET PIPING/CHAMBER) TO BE PROVIDED BY KESAR; MORE THAN 25 FEET WILL BE CHARGED EXTRA.							