

**ULTRA THERMO**

## Rain Test Chamber



- Specially designed for Simulating Rain Environment as per IS and JIS Standards
- Can be modified for other internal / international standard requirements
- Complete CNC Fabrication gives perfect fit and finish
- Inner box is fabricated using SS304, 1.2mm thick Material, completely TIG Welded for 100% Water Proof
- Fixed Sample rotation and Arm rotation to suit IS and JIS Standard.

## Safety Features and Facilities

- Single phase preventer
- Individual MCB's and OLR's for Pump and Motor
- Flame proof wiring
- Door Interlock
- RYB Indication
- Earth Link
- Kirloskar / Grundfos Pump ( 50LPM, 4bar )
- Window Wiper
- Timer with alarm
- Access Port hole 75mm diameter with silicone closure
- On off switch for Pump, Motors, Viewing light
- Shutoff valves for nozzles
- Water drain and recirculation facility
- Bye Pass and Pressure regulators

**ULTRA THERMO SCIENTIFIC**

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059

Email : [ultrathermoscientific@gmail.com](mailto:ultrathermoscientific@gmail.com); [thermo@yours.com](mailto:thermo@yours.com) Phone:9841025507

TNGST 0962538/03-04; CST 770373 dt. 17.9.03

# ULTRA THERMO

## SPECIFICATION SHEET

Dimension of Working Room (mm)	1000×1000×1000
Inner Box Material	SS304, 16SWG, with leak proof TIG Welding
Overall Dimension(mm)	1200 X1200 X 2000mm
Viewing Window with wiper and light	400X450mm
Performance	As per JIS and IS Standard
Water Pipe Line	φ18mm dia, SS304 Pipe Line with independent hand shutoff valves for JIS and IS Line
Water Reservoir	200Ltrs, SS304 Fabricated, Fully TIG Welded
Nozzle diameter	Φ1.2mm
Nozzle Position	<u>To suit JIS Standard</u> 40 Nos. 1.2mm dia Spray Nozzles in Rain arm Shower Nozzle in the Shower Arm <u>To suit IS Standard</u> 8 Nos., 1.2mm dia Spray Nozzle, at top four corners and centre of the 4 walls
Nozzle Head Angle	Adjustable to achieve 45deg Angle for Sample
Test Table	400mm dia;
Test Table Height	Adjustable; 250mm
Rotary speed of test table	17RPM for JIS and 10RPM for IS Standard
Water Flow Pump	Grundfoss / Kirloskar Pump to generate 25 to 40LPM at 2 bar pressure
Control Panel	Timer with Alarm, Rotary Switch for Table Rotation (JIS / IS ) Switch for Y Arm Rotation Switch for Pump ON Pressure Gauge for JIS Pressure Gauge for IS Water Flow Meter / Controller

## ULTRA THERMO SCIENTIFIC

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059

Email : [ultrathermoscientific@gmail.com](mailto:ultrathermoscientific@gmail.com); [thermo@yours.com](mailto:thermo@yours.com) Phone:9841025507

TNGST 0962538/03-04; CST 770373 dt. 17.9.03

# ULTRA THERMO

## SALIENT FEATURES



- 5 Pane Viewing Window with Viewing Light
- Drain, Rerouted to Water Reservoir (200Ltrs) for continuous test duty
- Silicone beading for the Door assembly
- Water Spray Nozzle positioned as per JIS and IS Standard
- Table Dia 400mm, Height : 250mm adjustable
- 17/10 RPM Table rotation as per JIS and IS standard
- 23 RPM ARM Rotation to suit JIS Standard
- Port Hole : 75mm dia with Silicone Closure
- Door interlock
- 2 HP Kirloskar / Grundfoss Water circulation Pump to produce up to 4bar discharge pressure with flow rate up to 40 LPM
- Concealed Non Corrosive Pipe Line with suitable bypass and pressure regulators
- Pressure gauge and Water Flow Meter to monitor and set the pressure and LPM
- Hour meter

## Rain Test as per JIS D 203



- A nozzle shaft 40mm dia is fixed at an angle of 45 degree at the top center of the panel.
- It contains one rain simulation arm and one Spray Nozzle arm.
- Rain Simulation Arm : 700mm length, 18mmdia, with 0.4mm dia. heads at 15 - 17mm gap
- Spray nozzle arm : 400mm length.
- The arms are made of SS 304. They are at right angles to each other.
- Arms are connected to nozzle shaft, which in turn is connected to a motor. The arms can be made to rotate at 23 RPM complying JIS requirement.
- Suitable glands are provided in the nozzle shaft for connection to water line.
- Table rotation at 17 RPM

### ULTRA THERMO SCIENTIFIC

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059

Email : [ultrathermoscientific@gmail.com](mailto:ultrathermoscientific@gmail.com); [thermo@yours.com](mailto:thermo@yours.com) Phone:9841025507

TNGST 0962538/03-04; CST 770373 dt. 17.9.03



## ULTRA THERMO

# Rain Test as per IS 9000 Part XV1



Four Nozzles as per IS standard are fixed at an angle of 45deg at the top 4 corners of the test space

Four Nozzles are placed at the centre of each four sides.

Table speed at 10RPM

Water Line Pressure 2bar

During the operations of all nozzles the combined flow rate will be 7.5LPM



## Water circulation system

Water is circulated in a closed loop arrangement. The water is stored in a tank with an inlet connected to regular water line and a Water Level Sensor / float valve to maintain the level of water. Grundfoss SS water pump with a discharge pressure of 1-4 Kg per sq. cm and flow rate of about 25- 40 liters/ minute will pump water into the centrally located cylinder. A pressure control valve with a pressure indicator, flow meter and suitable bypass system will be provided. The tank will have a drain valve

### ULTRA THERMO SCIENTIFIC

New No. 19, Old No, 3A, Manimegalai Street, East Tambaram, Chennai 600 059

Email : [ultrathermoscientific@gmail.com](mailto:ultrathermoscientific@gmail.com); [thermo@yours.com](mailto:thermo@yours.com) Phone:9841025507

TNGST 0962538/03-04; CST 770373 dt. 17.9.03