TSI ACCELERATED CARBONATION CHAMBER

'TSI' BRAND EQUIPMENTS, BEST USE FOR YOUR LABORAORY

- **Microbiology Laboratories**
- **Bio-technology Laboratories**
- **Bio-medical Laboratories**
- **Chemical Testing Chemical Engg. Laboratories**
- **Pharmaceuticals Manufacturer's**
- **Medical & Dental Colleges Laboratories**
- **Research Laboratories**
- **Educational & Research Institute's**
- **R & D Centre's & Q.C. Assurance**
- **Soil, Bitumen, Concrete Laboratories**
- **Environmental Testing Laboratories**
- **Civil Material Testing & Calibration Laboratories**
- **Water & Waste Water Testing Laboratories**
- **Material Management and Metrological Laboratories etc ….**

GSTIN No.33BNUPA8038G1ZW **E-mail: thermalscientific2021@gmail.com**

GeM Seller Id: **JSSP210003098413** **www.thermalscientific.in**

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COMPLETE SOLUTION FOR LABORATORY EQUIPMENTS

THERMAL SCIENTIFIC INSTRUMENTS, CHENNAI

CAT. No.1055 "TSI" ACCELERATED CARBONATION CHAMBER WITHMICROPROCESSOR BASED PID CONTROLLED DIGITAL TEMPERATURE HUMIDITY CONTROLLERAND DIGITAL CO^2 CONTROLLER WITH SENSOR



'TSI"Accelerated Carbonation chamber (CO^2 Incubator)for the determination of the required temperature and humidity conditions, at a certain concentration (20% or less) of carbon dioxide gas in a concrete specimens carbonation depth.

CONTRUCTION: It is double walled chamber. The inner chamber made out of 304 grade stainless steel and the outer chamber is made out mild steel sheet with attractive colour finished powder coated paint.

INSULATION: It is insulated by special grade glass / mineral wool in-between inner and outer chambers.

TEMPERATURE& HUMIDITY CONTROL: By Microprocessor based PID controlled Digital Temperature & Humidity controller cum indicator with suitable sensor for best accuracy

CO^2 CONTROL: By Digital CO^2 controller cum indicator withimported sensor

PROVISION OF CO^2: By inlet nozzle for admission of carbon dioxide through a CO^2 cylinder. The gas flow is regulated and controlled by using flow control valve and CO^2 regulator through Di-pharm / solined valve

AIR SYSTEM & CUT/OFF SYSTEM: By nozzle with Pressure cut/off device

UNIFORM TEMPERATURE: By heavy duty Axial Fan (2 Nos.) fitted back side of the Incubator, it will be maintaining uniform temperature thought the inner chamber

REFRIGERATION SYSTEM: By The Refrigeration system consists of "EMERISON" Copland make Sealed Gas Compressor, Air cooled condenser and heavy duty model driven fan are provided at the bottom. The evaporating coil fitted in the back side of the inner chamber

HUMIDITY: humidity created by steam injection method. The boiler tank is fitted, electromagnetic switch for controlling the wet heater from burning off if water level is not adequate. Float valve provided to control water level in the boiler tank

INTERIOR ILLUMINATION: Two nos. small type tubes for interior illumination with separate ON/OFF switch to see the material without opening the inner glass door and to avoid any temp. loss.

SALIENT FEATURES

- Double wall construction
- Interior fabricated from high grade stainless steel (S.S.304).
- Exterior body made of Mild steel material which is duly powder coated in attractive shades
- Double walled metal door with sponge type silicon gasket for air tight sealing
- Chamber illumination is accomplished by Fluorescent light with door switch.
- User friendly and tactfully designed chamber door and locking mechanism
- Equipped with Digital controller and Imported Temp, RH & CO2 Sensors
- Humidity generation by steam injection method
- Uniformity is maintained by quiet running blower.
- Hermetically sealed compressor CFC free compressor (134 A gas) coupled with evaporation coil and condenser.

- Removable perforated trays to facilitate better air circulation through samples
- Microprocessor based Digital Auto Tune PID temperature and direct RH digital controller.
- CO2 Indicator with imported CO2 Sensor
- Electrical wiring as per CE Compliances
- Aesthetic outer appearance and high quality
- Safety Features
- High temperature safety cut off
- Low water level boiler cut off
- Electrical overload cut off
- Time delay for compressor switch ON
- Electrical circuit breaker

Construction	Double walled, Inner 304 grade stainless steel outer G.I. sheet with powder coated paint
Thermal insulation	75 MM to prevent thermal loss
Temperature range	heating/cooling 10 to 60°C
Temperature accuracy	+/- 1.0°C
Least count / resolution	0.1°C
Humidity range	Ambient to 95% (Maximum carbonation takes place between 40%rH to 80% rH)
Humidity accuracy	+/- 3%
Least count / resolution	0.1%
CO^2 Concentration	Atmosphere concentration to 4.5% with accuracy of CO^2 in water is 4%)
Temp. & Humidity controller	Digital PID Temperature cum Humidity controller
Suitable to work	220V, 1 Phase, 50 Hz, AC supply.
Working chamber size	**Volume**
600 x 600 x 600 mm	216 Liters
600 x 900 x 600 mm	324 Liters
OPTIONAL ACCESSORIES	
01	Stabilizer
02	NAPL Calibration Certificate

THERMAL SCIENTIFIC INSTRUMENTS, CHENNAI

OUR RANGE OF PRODUCTS

- Autoclave – Vertical – double walled
- Autoclave Horizontal – Cylindrical / Rectangular
- Bacteriological Incubator
- Bio-Safety Cabinet Class A & B
- B O D Incubator
- Circulating water bath
- Constant Temp. Water Bath
- Curing Tank for concrete molds
- Deep Freezer – Vertical
- Environmental / Stability / Climatic Test chamber
- Fume Hood – Table top / Floor standing
- Furnace – Lab / Heavy duty / High temp. & Industrial models
- Hot Air Oven – Lab / Memmert & High Temperature
- Hot & Cold chamber
- Humidity chamber (Cabinet) with/without Refrigeration
- Industrial Furnace & Oven
- Incubator Shaker
- Laminar Air Flow Chamber (Cabinet) Horizontal / Vertical
- Le-chatelier bath 27°C for Cement Testing
- Low Temp. Water Bath
- Oil Bath – Circular / Rectangular
- Orbital Incubator Shaker – with / without Refrigeration
- Seed Germinator – Single / Double
- Tray Drier – 12 / 24 / 48 / 96 Trays
- Water bath double wall – Rectangular
- Water Bath – Low Temperature -10 / -20 / -40°C
- Water Bath – Constant Temperature
- Water Bath – Serological
- Water Bath shaker with / without Refrigeration
- Water Bath – Curing 100°C
- Water Bath – Hot & Cold 10 to 90°C
- Water Distillation unit SS Table top model

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