



# Creating Controlled Environments, Ensuring a Sustainable Future



## **Manufacturing Unit** In Bengaluru

- **Environmental Test** Chambers
- Salt Spray Chambers
- **Dust Chambers**
- **Rain Chambers**
- **Altitude Chambers**
- **Thermal Shock Chambers**
- **Vibration Chambers**

Envisys Technologies is an ISO 9001-2015, 14001-2015 and 45001-2018 certified company emerging as one of the leading manufacturers and suppliers of Environmental Test Chambers in the world sufficing the various types of environmental testing needs of spectrum of industries viz., automotive, electronics, defence, aerospace etc., as a one-stop solution provider in environmental testing.

#### **BUSINESS VERTICALS**

#### **One-stop Solution Provider in Environmental testing**

#### **MANUFACTURING**

Manufacturina of Standard & Custom built Environmental **Test Chambers** 

#### **REFURBISHMENT**

Refurbishment of Old/unused **Environmental Test Chambers** of Any Make

#### **MAINTENANCE**

**Annual Maintenance** (Preventive or Comprehensive) of Environmental Test Chambers





REPAIR/SERVICE

Repair/service of Environmental Test Chambers on Call Basis at Customer Sites



#### **RENTALS**

Rentals of Environmental Test Chambers on Monthly or Yearly Basis



#### **TESTING SERVICES**

**Testing Facility of Various Types** of Environmental Testing Services on Hourly Basis



The founders of Envisys Technologies after identifying the need for a reliable and competitive supplier in the environmental testing market to suffice the upcoming demand in the market for Environmental Test Chambers especially the one with an ability to customize the requirements of the industries Envisys Technologies is one such venture started by this trio with an objective

to manufacture environmental test chambers that not only satisfy customer needs but add value to the testing/equipment investment of its customers by ensuring the savings in their testing costs by supplying, servicing and supporting customer's competitively through-out the life-cycle of product/s with long standing relationships.

## **Everything You Need in Test Chamber**

Envisys designs and manufactures various types of Environmental Test Chambers starting from smaller standard range of mini and mid-range of test chambers to large custom-built walk-in test chambers to meet the requirements of variety of testing applications.

Ability to customize the requirements is the forte of Envisys since its inception. Envisys is a venture for a global era by leveraging its technical strengths in design and manufacturing of environmental test chambers providing custom environmental testing solutions for electronics, automotive, defence, aerospace and various other industry applications.



#### **Awards and Recognitions**



AWARD WINNER FOR
EXCELLENCE IN
MANUFACTURING PRODUCTS



AWARD WINNER FOR OUTSTANDING SUPPLY AND SERVICES



AWARD WINNER FOR ENTREPRENEURIAL EXCELLENCE



AWARD WINNER FOR BUSINESS EXCELLENCE



# ET-SERIES (Mid-Range) Environmental Test Chambers











#### ET-SERIES (Mid-Range)

#### **Environmental Test Chambers**

ET-Series Environmental Test Chambers offering the best of unique and uncompromised features at competitive prices. Ideal for choosing your best suit for variable product sizes from the available range of standard sizes. High performance & inherent reliability guaranteed for continuous testing of your products. These chambers can be easily movable on the wheels to convenient places and are easy to maintain.

#### Uncompromised features included at no additional add-on costs...

#### Models:

PARAMETERS	SPECIFICATIONS
ET150 - 40T/70T 40H/70H	550X400X700 MM - Work Space
ET300 - 40T/70T 40H/70H	650X600X800 MM - Work Space
ET600 - 40T/70T 40H/70H	800X850X900 MM - Work Space
ET950 - 40T/70T 40H/70H	1000X1000X950 MM - Work Space
ET1400 - 40T/70T 40H/70H	1100X1350X950 MM - Work Space
ET3000 - 40T/70T 40H/70H	1400X1500X1400 MM - Work Space
Volume	150, 300, 600, 950, 1400 & 3000 Litres
Temp	-40/-70 to 180°C
Relative Humidity	10 TO 95% RH



#### Construction:

- Block construction with easy reach-in maintenance sections and user- friendly control desk
- Made of SS interiors and CRCS powder coated exterior panels
- Designed to meet variety of testing applications on diverse sizes of testing specimens

#### **Control Console:**

ET-touch controller is custom designed to work with Envisys's Environmental Testing chambers. The controller hardware is built with high-performance industrial grade colour touch screen which allows the user to experience clear view of the chamber parameters. The software is designed for user friendly operation with highest level of safety and optimized chamber performance.



STAINLESS STEEL INTERIORS



HEAVY DUTY DI-CASTED HINGES



HEAVY DUTY CASTOR WHEELS



LED ILLUMINATION



HEIGHT ADJUSTABLE TRAY PROVISION / CABLE DUCT



DOOR MOUNTED PROGRAMMER CONTROL PANEL

#### Optional/s:

- Single Set Point PID Controller
- Custom design with additional features as per customer requirements

Additional SS Tray



# EM-SERIES (Mini-Range) Environmental Chambers











#### **EM-SERIES (Mini-Range)**

#### **Environmental Chambers**

EM-series Mini Environmental Chambers offers flexibility, uniformity and control accuracy required for cost-effective testing. Ideal for testing smaller products such as electronic components, automotive component, these chambers combine superior performance with compact design that is perfect for small component testing. These chambers can be easily mounted on a laboratory bench top.

#### Space Saving & Cost Competitive...

#### Models:

PARAMETERS	SPECIFICATIONS		
EM30 - 30/65T	300X350X300 MM – Work Space		
EM64 - 30/65T/H	400X400X400 MM – Work Space		
EM80 - 30/65T/H	400X400X500 MM – Work Space		
Volume	22, 30, 64 & 80 Litres		
Temperature	-30/-65 to 120 °C		
Relative Humidity	20 to 95% RH		



#### Construction:

- Block construction with easy reach-in maintenance sections and user- friendly control desk
- Made of SS interiors and CRCS powder coated exterior panels
- Designed to meet space constraint laboratories

#### **Control Console:**

ET-color touch programmer

OR

Microprocessor based PID controller with precise temperature and humidity control



STAINLESS STEEL INTERIORS



HEAVY DUTY DI-CASTED HINGES



HEAVY DUTY CASTOR WHEELS OR MS STAND



LED ILLUMINATION



TOP MOUNTED PROGRAMMER/ SINGLE SET POINT CONTROL PANEL

#### Optional/s:

- MS / Aluminium Frame Stand for Desktop Model
- Additional SS Tray

Custom design with additional features as per customer requirements



# **EWS-SERIES** Walk-in Environmental Chambers









#### **EWS-SERIES**

#### Walk-in Environmental Chambers

Mono-block/Pre-fabricated design EWS-Series Walk-in Environmental Chambers with custom-built features to meet testing needs of large-sized test specimens

- Mono-block walk-in chambers are designed for high-temperature operations using high-grade materials
- Pre-fabricated panel structured walk-in chambers are designed for low and medium temperature operations
- Integrated/remote refrigeration compartments and control panel
- Both Water-cooled and Air-cooled mechanical refrigeration system available with hermetic or semi-hermetic compressors for better efficiency
- Configured for temperature and relative humidity conditioning in the system ensuring high temperature accuracies, reliable test results

Conceptualizing your need for large test space into reality...

#### Models:

PARAMETERS	SPECIFICATIONS
EWS10K - 35T/65T 35H/65H	2200X2200X2000 MM - Work Space
EWS12K - 35T/65T 35H/65H	2200X2200X2400 MM - Work Space
EWS14K - 35T/65T 35H/65H	2200X3100X2000 MM - Work Space
EWS16K - 35T/65T 35H/65H	2200X3100X2400 MM - Work Space
EWS18K - 35T/65T 35H/65H	2200X4100X2000 MM - Work Space
EWS22K - 35T/65T 35H/65H	2200X4100X2400 MM - Work Space
Volume	10000,12000, 14000, 16000, 18000 & 22000 Liters
Temp	-35/-65 to 90 °C/150 °C
Relative Humidity	20 to 95% RH

#### **Control Console:**

- ET-touch color touch programmer
- RS-232, RS-485, USB, Ethernet and USB host port
- Built-in web server which allows remote monitoring and operation of your test chamber from any internet connected PC or Smart Phone

#### Optional/s:

- Remote Control Consoles
- Height adjustable specimen racks
- Cable ports



STAINLESS STEEL INTERIORS



EASILY ACCESSIBLE CONTROL PANEL



SINGLE / DOUBLE DOOR/S WITH TOUGHENED GLASS INSPECTION WINDOW



HEAVY DUTY FIXED METALLIC LEGS FOR MODULAR DESIGNED WALK-IN'S



CABLE DUCT WITH PORT-PLUG



MULTI-POINT LOCKING



# ETS-SERIES Thermal Shock Chambers









#### **ETS-SERIES**

#### **Thermal Shock Chambers**

ETS-Series air-to-air and liquid-to-liquid Thermal Shock Chambers from Envisys are available in different volumes to suit the varied testing needs. Horizontal or vertical models consisting of cold and hot zones with product carrier basket of sizes 50, 100, 150, 300, 600 and 900 litres which transfers the specimen under test between cold and hot zones using electro pneumatic / motorized basket movement.

Environmental Stress Screening Tests using Envisys Thermal Shock Chambers ..

#### Models:

PARAMETERS	SPECIFICATIONS
ETS - 50	500X350X300 MM
ETS - 100	500X500X400 MM
ETS - 150	600X500X500 MM
ETS - 300	800X750X500 MM
ETS - 600	900X900X750 MM
ETS - 900	1000X1000X900 MM
Volume	50, 100, 150, 300, 600 & 900 Litres
Temp	-70 to 200°C
Basket Transition Time	< 10 Secs



#### **Features:**

LED illuminated work-space with multi-pane vaccumized glass view window (on the hot zone)

High grade SS interiors & CRCS powder coated outer panels with durable SS basket with tray slots

Silicone rubber double layered sealing and heavy duty di-casted aluminium locks and hinges

Vertical/horizontal basket changeover using electropneumatic/motorized mechanism

Easy access door handle cum HMI mount-front access operating monitor

#### Construction:

- Mono-Block construction with easy reach-in maintenance sections and user- friendly control desk
- Designed to meet variety of testing applications on diverse sizes of testing specimens
- Made of SS interiors and CRCS Powder coated exterior panels



STAINLESS STEEL INTERIORS



VIEW WINDOW WITH LED ILLUMINATION



ALUMINIUM DI-CASTED DOOR-LOCKS



ELECTRO-PNEUMATIC
/MOTORIZED
BASKET MOVEMENT



SS SPECIMEN
CARRYING TEST
BASKET



DOUBLE LAYER SILICONE GASKET



# EBS/ECS- SERIES Salt Spray Chambers









#### **EBS/ECS-SERIES**

## Salt Spray Chambers

EBS/ECS Series Salt Spray Chambers (Basic & Cyclic) are manufactured by Envisys in different versions to meet the variety of testing applications as per international standards viz., ASTM DIN GM JIS MIL etc...

#### Corrosive Resistance Testing of Your Products...

#### Models:

PARAMETERS	SPECIFICATIONS	
EBS/ECS 300	850X550X650 MM - Work Space	
EBS/ECS 600	900X800X850 MM - Work Space	
EBS/ECS 900	1350X800X850 MM - Work Space	
EBS/ECS 1500	1500X1000X1000 MM - Work Space	
Volume	300, 600, 900 & 1500 Litres	
Temp	Ambient to 50°C	
Humidity	Optional	
EMS-Series-MINI-Salt Spray Chamber		
EMS-100	600x500x400 MM – Work Space	



ECS-01 Optional Accessory for Renault D17 2028 (ECC-1)

**OPTIONAL ACCESSORIES FOR ECS MODELS** 

ECS-02 Remote Refrigeration Unit RRU/A1, RRU/A2

ECS-03 Spray Header Cycle (Vertical down)

ECS-04 Immersion Test Cycle

ECS-05 Wall Wash

ECS-06 SO2 Gas Dozing

ECS-07 De-Humidifier Unit

ECS-08 Multi-Solution Salt Spray

ECS-09 Controlled Humidity Cycle

ECS-10 Drain Treatment Unit

#### **Construction:**

 High corrosive resistant non-metallic glass-fibre reinforced structure

#### **Optional Control Consoles:**

Single set point microprocessor based PID controller for salt spray and saturation temperature control

Touch screen based complete user-programmable console capable of controlling chamber & saturator temperature, perform cyclic operations



Atomizer



Saturator/Bubble Tower



Tape Heaters



Brine-Solution Tank



Hot Air Blower



Internal Spray Cabinet



# ER - SERIES Rain Chambers













IPX1-IPX2

IPX3-IPX4

IPX5-IPX6 IPX6-IPX7

IPX9K

JSS 55555/IS9000

JIS D 0203

#### **ER-SERIES**

#### **Rain Chambers**

ER-Series Rain Chambers are designed and manufactured to meet IP tests viz., IP Test (X1 to X8) IP Test (X4K, X6K & X9K) in different possible configurations ER-Series Rain Chambers are also built according to various other international standards viz., BIS, JIS, IEC-60529, EN, DIN, JSS-55555, MIL etc.

#### Determining your product susceptibility to liquid ingress...

#### **Features:**

- Designed to meet Ingress Protection Standards
- Built to the requirement from component level testing, room level testing to field testing of large sized products
- High quality corrosive resistance material for construction
- Drip-tank designed and manufactured to meet the desired fall-rate as per standards
- Spray and Jet nozzles are manufactured in single operation CNC with high dimensional accuracies
- Highly reliable water circulation pump and pipeline
- Vibration-free rotating table with variable speed control
- Full-view glass door with wiper

#### Variety-I

Pre-set programmable timer

Each sub-system with independent selection switch Single-set point microprocessor based PID controller for IPX9K

Digital RPM indicator and sensor to read table RPM Analog pressure gauge and flow-meter for water pressure and flow monitoring

Manual operated by-pass valves to set required flow and pressure

#### Variety-II

Touch screen based complete user-programmable console capable of controlling and monitoring rain test parameters viz., pressure, flow-rate, set duration etc.



**IPX9K** 



IPX1 - IPX4 JIS D0203



IPX3 – IPX4 IPX9K JIS D0203 JSS 55555



IPX1 - IPX2



IIPX5-IPX6 IPX9K JIS D203



IIPX3-IPX4



IIPX1-IPX2



IPX1-IPX2 & IPX3-IPX4



# EDC - SERIES Dust Chambers













#### **EDC-SERIES**

#### **Dust Chambers**

Designed to simulate most aggressive dust filled environments as per various international standards to meet the dust test application of electronics, automotive and other components...

#### Dust Testing... Determining the Ingress Protection...

#### Models:

MODELS	EDC - 1000	EDC - 1500	EDC-3375
Working Volume	1000 Litres	1500 Litres	3375 Litres

Working Dimensions 1000X1000X1000 MM 1500X000X1000 MM 1500X1500X1500 MM

#### **Performance**

#### Standards of Compliance And Scope

IEC - 60529

IEC-68-2-68

DIN 40050 Part 9

DIN/VDE 470

DIN EN 60068-2-68

**SAE J575** 

MIL

JSS

JIS etc.,

Note: Single system doesn't comply with all standards. The test systems are manufactured as per user specified or required standards

#### **Control Consoles:**

User-friendly touch control/Multi-function programmable timer

Cycling dust test programmable capability

Blower speed regulation to ensure metered uniform dust

#### Construction:

- Free-flow dust circulation centrifugal blower
- Uniform floating dust simulation across the test space
- Dust pre-heating mechanism for free flow of the dust
- Hopper re-vibration for free fall of settled dust
- Blower speed regulation to ensure metered uniform dust floating inside the test space
- Oil-free vacuum pump to simulate negative pressure for IP6X test
- Volumetric air-flow meter/counter for IP6X test
- View window with illumination
- User-friendly Multi-function programmable timer



Vacuum System



Vacuum Flow-Meter and Regulation



Dust Circulation System



**Dust Agitation - JIS** 



Agitation Blades



Single Set Point/ Programmable Controls



# EA - SERIES Altitude Chambers











# Combined Altitude Temperature and Humidity (CATH) Chambers

CATH (Combined Altitude Temperature and Humidity) Chambers are designed for simulating the actual aerospace conditions for testing aerospace / automotive components at high altitude thermal conditions.

#### Simulation of actual conditions of aerospace testing...

Available Range	300, 600, 950 and 1400 Litres
Models:	Work-Space Dimensions
EA300 - 40T/70T 40H/70H	650X600X800 MM
EA600 - 40T/70T 40H/70H	800X850X900 MM
EA950 - 40T/70T 40H/70H	1000X1000X950 MM
EA1400 - 40T/70T 40H/70H	1100X1350X950 MM
Temperature	-40/-70°C to 180°C
RH	10% to 95% (optional)
Altitude	Up to 10 m bar



RS-232, RS-485, USB, Ethernet and USB host port Built-in web server which allows remote monitoring and operation of your test chamber from any internet connected PC or Smart Phone

#### **Control Console:**

ET-color touch programmer with built in web server for monitoring and operating from any internet connected PC or smartphone

#### Construction:

Mono-block construction with easy reach-in maintenance sections and user-friendly control desk.

#### **Additional Features:**

**Robust Door Locking** 

**Feed Thro Connectors** 

Adjustable Door Hinges



10mm thick SS interiors



Door Locking Mechanism



Electrical Feed-Thro Connectors



Humidity Butterfly



Vacuum tight D-type silicone rubber sealing



Direct coupled multi-vane rotary vacuum pump

#### **ETV-SERIES**

#### **Vibration Chambers**

Environmental Chamber with Vibration Shaker Interface provision consists of Environmental Test Chamber, Vibration Shaker Interface Provision, HMI/PC PLC based Control System etc.,

This chamber is designed with unique features to meet the control parameters like Temperature, Humidity (optional) and 3 Axis Vibration Controls as per customer specified requirements.





#### Combined tests made easy...

#### Construction:

Bottom of the chamber will have specially designed interchangeable hood with interface mechanism to couple the shaker and chamber during combined tests.

Chamber will be moved up and down vertically through friction-free guided U channel and wheel

Chamber will be moved horizontally manually using heavy dutycastor wheel with railing

#### Models:

Parameters	Specifications
ETV150 - 40T/70T 40H/70H	550X400X700 MM
ETV300 - 40T/70T 40H/70H	650X600X800 MM
ETV600 - 40T/70T 40H/70H	800X850X900 MM
ETV950 - 40T/70T 40H/70H	1000X1000X950 MM
ETV1400 - 40T/70T 40H/70H	1100X1350X950 MM
Volume	150,300,600,950&1400 Litres
Тетр	-40/-70 to 180°C
Relative Humidity	10 to 95% RH



#### **ESC-SERIES**

#### **Sub-Zero Chambers**

Strip -Cooled Deep Freezer for Sub-Zero Treatment of Razor Blades. Deep Freezer for Razor Blades designed for sub-zero process of razor blades coming out of furnace. It works on conduction principle of heat transfer method to cool the heated-strip-by-sub-zero-process

#### Available in 2 or 4 strips

Characteristics	Description		
Temperature Limits	Ambient To - 80°C		
No of Strip pass	2/4 Numbers		
Strip slot dimensions	50 X 15 MM		
Strip slot to slot	12 MM		
Ground to strip pass height	700 MM		
Max Speed	70 Feet /Min		
Suitable For	Thickness 0.4mm and width max 15mm		





#### **Conditioning Section:**

Condition section is made of solid block aluminium heat exchanger via conduction method.

Brass sheets 2 or 4 numbers of 50x15mm slots will be provided for passing the strips.



#### **Control Console:**

Two numbers of single set point digital temperature PID Controllers One controller for temperature controlling and an other for comparison



#### Freezing the Razor Blades...



#### Freezing the Automotive Components...

Vertical Sub-Zero Chambers for heat treatment applications of automotive components.

Characteristics	Description
ESC 140 - 80-1-T	25kg/hr
ESC 280 - 80-1.5-T	95kg/hr
ESC 600- 80-6-T	125kg/hr
ESC 990 - 80-7.5-T	250kg/hr
ESC 1700 - 80-7.5-F	225kg/hr
ESC 2500 - 80-10-F	300kg/hr
Volume	140, 280, 600, 990, 1700 & 2500 Litres
Temp	Ambient to 80°C

#### **EO-SERIES**

## **Industrial Ovens / Dryers**

Curing, Heat Process, Ageing, Annealing etc., Solutions...

#### Standard Oven with and Without View Windows

Standard Ovens are manufactured in different sizes Viz., 150, 300, 600,950 and 1400 Liters volumes for high temperature simulation up to 250°C for curing, drying, ageing, annealing or any heat processing tests at higher temperatures Envisys has the oven to meet your needs.





#### Vacuum Oven

Vacuum, Ovens are manufactured in different sizes Viz., 150, 300, 600,950 and 1400 Liters volumes for high temperature simulation up to 250°C and Vacuum up to 1 m bar

#### Walk-in Burn-in Chambers

Walk-in Burn-in Chambers are designed and manufactured as per the customer requirements is single block or pre-fabricated structure for high temperature simulations meeting the variety of applications





#### **Industrial Dryers**

Designed for Pharmaceuticals & Chemicals, Food, Textiles and other industries. Triple walled in construction for close loop circulation. Available in various capacities of drying. Custom-built to various drying needs









S	Models	No of Trays	Inner Size	Outer Size	Heater Load	Door	Trolley
TAN	ETD12 - 150	12	840X460X920 MM	1375X660X1375 MM	6 KW	1	-
ANDARD	ETD24 - 150	24	840X920X920 MM	1930X1220X1375 MM	12 KW	1	1
	ETD48 - 150	48	1020X920X1830 MM	2035X1220X2185 MM	18 KW	1	1
RANGE	ETD96 - 150	96	2040X920X1830 MM	3560X1220X2185 MM	30 KW	2	2
m	ETD192 - 150	192	2040X1830X1830 MM	3560X2080X2185 MM	54 KW	2	4

#### **ETC-SERIES**

#### **Industrial Chillers**

ETC-Series air-cooled water chillers designed for industrial application of various industries. Built to operate in stringent ambient conditions with continuous duty applications

#### Chilling Solutions from Envisys ...

#### **Features:**

- Eco-friendly Chillers with Compact Design
- High flow-rate Low pressure-drop evaporatol
- · High-efficiency refrigeration compressol
- · Consistent outlet water temperature
- · Built for operating in stringent ambienb
- · Accurate control and measurement system

#### **Construction Features:**

- Eco-friendly refrigerant
- Hermetic scroll/reciprocating compressors
- Finned coil condenser with copper tubes and aluminium fins
- Axial fans di-casted with aluminium and crescent shaped blades
- BPHE for evaporation
- Storage tank with filling/drain valves, pump and pressure gauge
- Level sensors
- Low/High refrigerant pressure switches
- Pressure gauges
- Phase monitor against phase loss, phase reversal
- Compressor crankcase heater



Single set point Digital Temperature controller will be provided with sensor to control the water temperature in the tank during re-circulation









#### **ETF-SERIES**

#### **Temperature Forcing Systems**

A micro cooling unit designed to simulate the various working temperature conditions on the electronic chip boards.

#### **Construction Features:**

Precise Temperature Accuracies with Reliable Test Results

Temperature Limits: -40/-60°C to 30°C

Temperature Accuracies: ±2-3°C

► Temperature Rate of Change: 20-25 deg /min (Non-linear)

Maintenance Free Access to The System

Self-Sufficient System

Compact with small footprints suitable for any space constraint laboratories

Low decibel system

Suitable for testing electronic chips / devices

Environmentally friendly refrigerants

Efficient heating

Microprocessor based single set point PID temperature controller with data logging

Flexible hose up to 2.5-3.0m

Interchangeable heads according to chip size.

Inbuilt electrical control panel with switchgear system

# ENVISYS I





#### **Control Console:**

Hot and Cold temperature control system with either Single Set Point or Dual Loop controllers of Autonics make as per customer choice and preference Microprocessor based PID controller with precise temperature control Heating will be controlled through zero-crossing relay control system







#### **EWS-SERIES**

## Solar Panel / PV Module Test Chambers

EWS-Series Environmental Test Chambers for Solar Panels and PV Modules testing with uncompromised features at competitive prices. Ideal for choosing your best suit for variable sizes of Solar Panels and PV Modules from the available range of standard and Custom-Built Chambers. High performance & inherent reliability guaranteed for continuous testing of your products

#### Thermal Cycle, HF and Damp Heat...

Standards	
IEC 61215	The standard table indicates the
IEC 61646	sample test procedures of solar panels/PV modulestesting according the most recognized standards. Envisys
IEC 61730	can design and manufacture chambers according to the customer needs on
IEC 62108	specified standards, sizes of panels, ramp rate or if the customer wishes to
UL 1703	have independent chamber for damp heat cycle, Envisys can provide the
ASTM E1171	same to meet customers ASTM E1171 demand for testing the panels.



#### **Control Console:**

Color Touch Screen Controller is built around high-performance core hardware with integrated functionality. Touch screen controller is constructed with Cast Aluminium IP 66 protected enclosure for front screen with many added features viz., Dual USB host port, on board 256MB non-volatile flash memory and extended external memory up to 2 GB.





#### **ETU-SERIES**

# Environmental Chambers For UTM Interface

ETU-Series Environmental Test Chamber for conducting environmental tests at elevated and freezing temperatures in order to perform integrated tests for hot & cold conditions on universal testing machines.

## Thermal Chambers from Envisys for Interfacing with any UTM's...

Temperature–Relative Humidity–Salt Fog Integrated Test Apparatus for UTM Interface is designed to meet the specific test requirement of integration test, for this application, testenclosure is designed for the rig interface in split units, for this from the RC (Remote conditioning) unit purge the conditioning air to test enclosure



#### **Specialized Features of UTM Interface Chambers:**

Designed in custom sizes as per the requirements.

Temperature range +/-30 / +/-65 to 80 °C and 20% to 95% RH

LN2 cooling optional

Control features are optional



## TEMPERATURE - RH - SALT FOG INTEGRATED TEST EQUIPMENT FOR UTM INTERFACE



Custom designed UTM Chambers designed in different sizes as per the requirement



**UTM Miniature Chambers** 



Top and Bottom of the chamber for interfacing with UTM interfacing slots and cover

#### **ETB-SERIES**

#### **Battery Test Chambers**

Envisys - Environmental Chambers for Battery Testing are designed and manufactured to meet various types of battery testing requirements of its customers by keeping all safety options in mind against any harmful explosions or ignitions and user safety while testing these batteries for environmental stress conditions

Available Range	150, 300, 600, 950 and 1400 Litres
Temperature	-40/-70 °C to 180 °C
RH	10% to 95% (optional)

## Safe Testing of Batteries Against Environmental Stresses...

These Chambers are designed and manufactured to meet various types of battery testing requirements of its customers by keeping all safety options in mind against any harmful explosions or ignitions and user safety while testing these batteries for environmental stress conditions.

#### **Safety Features:**

- Fire Suppression System (Co2).
- Automatic Air Exchange System.
- Mechanical Locking & Fire Extinguisher System.
- Mechanical Pressure Relief Port.
- ▶ Fire Detection/Alarm System (O2 & CO)
- Status Indication & Smoke Detection.









Door Locking Mechanism





Status Indication

Automatic Air Exchange System\*



**Temperature Safety** 

Controller

Fire Detection/Alarm System (O2 & CO)



Electro Magnetic Lock

Chamber Ventilation Blower & Exhaust Port



Mechanical Pressure Relief Port



Fire Suppression System (Co2)

#### **EUV-SERIES**

#### **UV Chambers**

#### **Ultraviolet Rays...**

Products in their lifespan are exposed to sun rays including ultraviolet (UV) light. UV light can cause degradation and discoloration of materials, which can affect the performance and lifespan of certain products like PV panels. To prevent this, UV light simulation is used to test the durability and UV resistance of products.



#### **UV Light Simulation Equipment**

There are several types of UV light simulators that can be used to test products. The most common types include: Xenon arc lamps: These lamps simulate the full spectrum of sunlight, including UV, visible, and infrared light. Fluorescent UV lamps: These lamps emit UV radiation in the UVA and UVB range. Metal halide lamps: These lamps emit UV radiation in the UVA and UVB range, as well as visible light. The choice of UV light simulator will depend on the specific requirements of the products being tested.

The results of a UV light simulation test can be used to determine the UV resistance and durability of the products. If the product shows signs of degradation or discoloration, it may not be suitable for long-term use in outdoor environments. If the product retains its color and appearance, it can be considered UV resistant and suitable for outdoor use.



UV light simulation is an important tool for testing the durability and UV resistance of various products. By using a UV light simulator and following the appropriate test procedure, it is possible to identify any potential issues with products before they are deployed in outdoor environments



Ability to customize the requirements is the forte of Envisys since its inception. Envisys is a venture for a global era by leveraging its technical strengths in design and manufacturing of environmental test chambers providing custom environmental testing solutions for electronics, automotive, defence, aerospace and various other industry applications.



#### Thermo Mechanical Test Chamber

Consisting of self-standing thermal chamber with in-built air-cooled refrigeration system and control panel integrated with mechanical structure, hydraulic power pack and cylinder for testing electrical insulators for tensile and cantilever tests as per standards.



#### Drive-in Test Chamber

Walk-in Environmental Test Chamber for vehicle level testing of two-wheeler vehicles for temperature and humidity parameters as per automotive standards with side view thro's of entire vehicle during testing.



#### **Drop-Test Machine**

Drop-Test Machine from Envisys designed to meet customized drop-test requirements. Automated or semi-automated designs are available with adjustable drop height range 400-1500 mm with load bearing capacity up to 10 kgs and more. Motorized adjustment of height using gear motor for quick and easy operation





#### Environmental Test Chamber for Steering Boots Endurance Testing

Environmental Test Chamber integrated with three axes actuator mechanical test rig for combined tests of steering boots endurance testing application



#### Walk-in Salt Spray Chamber

Walk-in Salt Fog Chamber from Envisys with spacious work spaces built at site using pre fabricated corrosive resistant materials for simulating salt fog conditions as per various standards for testing larger samples



#### Vacuum Degassing Chamber

Vacuum Degassing (outgassing)
Chamber to perform degassing
(outgassing) procedures to reduce
outgassing from materials. The
system is operated in the
condition of temperature range of
50 to 120°C and low pressure of
1x10-6 Torr





#### Oil Circulating Oven

Oil Circulating Ovens from Envisys custom designed to meet the flame-proof testing of chemical explosives with indirect heating using thermo fluids as heating media. The system is designed with remote control units for testing the explosives as per standards



#### Environmental Test Chamber for skid mounted door fixing provision to test P4 speed sensors

Environmental Test
Chamber with skid
mounted door fixing
provision with servo motor
integration to rotate the
internal disc of 4000 rpm
to test P4 speed sensors
used in various defence
applications which will
have the provisions of gap
and angle adjustment for
testing the sensors at
rated speed with different
angle and gaps.



#### Railway Sleeper Test Chamber with Load Test Bench

Customized 500 kN hydraulic load test bench with integrated -60 °C to + 60 °C environmental test chamber for testing full and half railway sleepers with various load and environmental conditions.



#### Impact Test Set Up

Impact Test Set-Up from Envisys is designed to simulate mechanical abuse of cells and batteries from an impact that can result in internal short circuit.





#### Electric Cycler -Climatic Chamber

Electric Cycler Climatic Chamber from Envisys is custom designed to meet the testing of automotive mirrors during automatic folding and unfolding of mirrors in actual conditions



#### Custom Rain Simulation Chamber

Custom Rain Simulation Chamber designed by Envisys for simulating the different rain patterns and IR



# Air/N2 Cooled Cylinder Cooling Chamber

Custom designed air/N2 cooled chamber for cooling the cylinders up to -25 deg C with automatic push-pull conveyor with limit switch interlocks and pneumatic vertical door opening provisions.





#### Combined Vibration and Climatic Test System (CVC)

Combined Vibration and Climatic (CVC) Test System is designed and manufactured by Envisys to perform combined tests ie., vibration test in vertical directions with high/low temperature, humidity and vacuum test as per MIL STD 810G



#### Intensified Standard Alternating Trial chamber (ISAT Chamber)

Custom-built Intensified standard alternating trial chamber (ISAT Chamber) with remote conditioning unit at a distance of 1 meter from the test space connected through an insulated ducting



#### Mud Water Test Equipment

Chamber contains agitator motor and speed drive with multiple blades to splash the muddy water into automotive components





#### Vibration Interface Chamber

Larger sized Vibration Shaker Interface chamber up to 7200 liters volume for integrating with electro-dynamic shaker custom designed by Envisys for testing larger sized specimens for integrated tests viz., thermal and vibration simulations



#### Battery Crush Test Chamber

Battery Crush Test Chamber used for lithium-ion battery crush tests. The equipment simulates force, voltage drop and deformation of the battery during test with display communications. Pressure (max kN to 20kN) is applied using inbuilt hydraulic power pack



#### E-motor Testing Chamber

E-motor testing chamber is designed by Envisys to simulate the required climatic conditions inside a confined work-space for a e-motor test inside the test space externally connected to dyno test rig through an extended shaft on the door of the chamber with a chamber movement facility on the track.





#### **Fogging Test Chambers**

A fogging test chamber is a specialized piece of equipment used to perform fogging tests on headlamps. The chamber creates a controlled environment that simulates the conditions that can cause fogging, such as high temperature, high humidity, infra-red radiation and rain simulation. In real world both sides of lamp are exposed to different environmental conditions. For example head lamp of the car, one side will be exposed to heat of the engine and humidity of the climate and the other side (lens side) will be exposed to ambient temperature, humidity, sun radiation and rain.



#### Air to Water Thermal Shock Test Chamber

Air to water thermal shock testing is commonly used in industries such as automotive, aerospace, and electronics, where materials and products may be exposed to sudden and extreme temperature changes in the field. By subjecting a specimen to air to water thermal shock testing, manufacturers can evaluate the performance of the material or product under these conditions and make any necessary design changes to improve its durability and reliability.



#### **Spectrum Of Services**

#### Refurbishments



Envisys undertakes the refurbishment of old Environmental Test chambers/systems to refurbish as per latest technology to make them new for re-use.

#### **Repair Services**



Envisys provides service to all kinds of Environmental Test Chambers. The break-down test chambers will be inspected and repaired to working condition.

#### **Maintenance Contracts**



Envisys offers maintenance contracts to all types of Test Chambers to completely eliminate down-time costs of testing systems. Preventive or Comprehensive maintenance contracts can be availed.

#### Rentals



Envisys provides the rentals of selected range of Environmental Test Chambers on monthly/daily rental basis. Rental services are limited to India only.

#### Committed to Serve Our Customers

We at Envisys are committed to provide all the products and services mentioned in our profile with great quality and utmost dedication towards our work

Give us a call or shoot us an e-mail to know how we can help you.

#### **Testing Services**



Testing facility for various types of environmental testing services on hourly basis

#### **Our Customer Help Desk**



+91 80 28377888



+91 7353599800

#### **Other Services**



#### Calibration

Envisys provides the calibration services through an NABL accredited laboratory for limited range of its products.



#### **Technical Consultation**

Envisys provides the calibration services through an NABL accredited laboratory for limited range of its products.



#### Software Upgrades

Envisys also supplies the spare parts for range of environmental test chambers manufactured by Envisys available in stock at the facilities of Envisys



#### **Refrigeration Upgrades**

Refrigeration upgrades are offered by Envisys for incorporating the latest technology to reduce electricity, emission and operating costs of its customers



#### Training

Team of professionals from Envisys conducts periodic trainings on latest technologies & trends in the environmental testing to build facilities of Envisys awareness level among its users.



**Spare Parts** 

Envisys also supplies the spare parts for range of environmental test chambers manufactured by Envisys available in stock at the facilities of Envisys

In Envisys it's the PEOPLE, PROCESS TECHNOLOGY that matters in building a quality system of high reliability in environmental simulation systems. It's the competency in design, expertise and experience that differentiates the products of Envisys from competitors



- · Changing testing needs flexibility
- Building competitive differentiation
- · Just-in-time Techniques
- Efficient
- Transformation
- Streamlined
- Best Practices
- Flexibility

#### **CUSTOMERS OF ENVISYS**

#### **Automotive**

- AKZO NOBEL INDIA
- BRIDGESTONE AUTOMOTIVE
- TRITON VALVES
- ROOTS INDIA
- ADVIK
- SMR AUTOMOTIVE
- HYUNDAI
- MOTHERSON AUTOMOTIVE
- ATHER ENERGY
- BAJAJ
- TVS RUBBER
- ► HMCMM
- KNORR-BREMSE
- SPARK MINDA
- ZF INDIA
- MERCEDES BENZ
- SEG AUTOMOTIVE
- KIA MOTORS
- VARROC GROUP
- I-WORKZ AUTOMOTIVE



- TVS MOTOR COMPANY
- HERO MAGNETI MARELLI
- SUPRAJIT ENGINEERING
- ROYAL ENFIELD
- BRAKES INDIA
- MAHINDRA AND MAHINDRA
- OLA ELECTRIC
- THE AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA (ARAI)
- GENERAL MOTORS
- VEONEER INDIA
- UNO MINDA LIMITED
- CONTINENTAL
- DENSO KIRLOSKAR
- PRICOL
- WORD OF RIVER
- ULTRAVIOLETTE AUTOMOTIVE
- SEG AUTOMOTIVE
- VOLVO

#### **Test Labs**

- **BE ANALYTIC SOLUTIONS**
- TUV RHEINLAND
- SKC ENVIRON LABS
- **UL INDIA**
- YADAV MEASUREMENTS
- WIPRO TARANG LAB
- BUREAU OF INDIAN STANDARDS
- ELCIA CLUSTER
- ENVITEST
- ELCA LAB
- ► HCL TECHNOLOGIES
- AANCHAL TECHNO SOLUTIONS



- MOHALI HITECH CLUSTER
- CSA GROUP
- QVC CERTIFICATION SERVICES
  - ESDM CLUSTER
- ► ELECTRONICS REGIONAL TEST LABORATORY (ERTL)
- EMTAC LABORATORIES
- TUV INDIA
- QUALITEK LABS
- VIMTA LABS
- KARNATAKA TEST HOUSE
- TUV NORD

#### **Defence & Aerospace**

- ALPHA DESIGN TECHNOLOGIES
- CQAE (WE)
- SIKA INTERPLANT SYSTEMS
- MKU LIMITED
- NUCON AEROSPACE
- MICROSEMI
- SHAR SATISH DHAWAN SPACE CENTRE (ISRO)
- BOEING

- SASMOS HET TECHNOLOGIES
- MAK CONTROLS & SYSTEMS
- CONTROLLERATE OF NAVAL ARMAMENT INSPECTION
- SOCIETY FOR INTEGRATED CIRCUIT TECHNOLOGY & APPLIED RESEARCH (SITAR)
- NATIONAL AEROSPACE LABORATORIES (NAL)
- BHARAT ELECTRONICS LTD (BEL)
- BHABHA AUTOMIC RESEARCH CENTRE (BARC)

#### **Electrical & Electronics**

- LIGHTING TECHNOLOGIES
- ENTERPRISE SOFTWARE
- SOLUTIONS LAB
- TATA POWER SED
- MAXLINEAR TECHNOLOGIES
- GE SOURCING
- INFINERA
- MATRIX COMSEC
- TROLEX INDIA
- ELCOM INTERNATIONAL
- ANDREW TELECOMUNICATIONS
- ► ITI LTD
- PARK CONTROLS &
- COMMUNICATION
- DATASOL
- COMDE DERENDRA INDIA
- ADI-EMT
- CROMPTON GREAVES
- ECIL
- TEJAS NETWORKS
- ▶ DEEPTI ELECTRONICS & ELECTO
- OPTICS
- ON SEMICONDUCTORS

- FCI AMPHENOL
- ► GE INDIA
- MICRON EMS
- NVIDIA
- **ERDA**
- OPTIMIZED ELECTROTECH
- LARSEN & TOUBRO
- BRAY CONTROLS
- MANATEC ELECTRONICS
- SYSCON INSTRUMENTS
- OEN INDIA LTD
- AMPHENOL OMNICONNECT
- AXON INTERCONNECTORS
- ROCKWELL AUTOMATION
- FOXCONN- CRESCENT
- TECHNOLOGIES
- ► E-CON SYSTEMS
- MICRON TECHNOLOGY
- **OPERATIONS**
- SKIPPERSEIL
- CYIENT DLM
- SLING MEDIA
- AITECH INNOVATION

- KALKI COMMUNICATIONS
- **TECHNOLOGIES**
- SLN TECHNOLOGIES
- APAR INDUSTRIES
- R&M ELECTRONICS
- CYPRESS SEMICONDUCTORS
- AVANTEL
- CENTUM ELECTRONICS
- RADIALL INDIA
- WISTRON
- HONEYWELL TECHNOLOGY
- SOLUTIONS
- HUBBELL INDIA
- TE CONNECTIVITY
- PREMEIR EVOLVICS
- INFINEON TECHNOLOGIES
- RAKON INDIA
- VISHAY COMPONENTS
- LOTUS WIRELESS
- KAYNES TECHNOLOGY
- SCHNEIDER ELECTRIC
- IWAVE SYSTEMS
  - MELZ INDCOSYS SOLUTIONS

#### **Others**

- PRAXAIR INDIA
- GE HEALTHCARE
- SKF TECHNOLOGIES
- JSW STEEL
- SOLID STATE SYSTEM
- SAAB ENGINEERING
- INGERSOLL RAND
- BISS-ITW
- ESAB INDIA
- Dr. WIESNER TEST & AUTOMATION
- ANVIN TECHNOLOGIES
- LAKSHMI TECHNOLOGY AND ENGINEERING INDUSTRIES
- SAMAH RAZOR BLADES INDUSTRIES
- ECONOMIC EXPLOSIVES
- ARDEX ENDURA
- MOHALI HITECH CLUSTER

- BOSCH
- GLOSIL INTERNATIONAL
- ENPHASE
- **DANFOSS INDUSTRIES**
- NASH INDUSTRIES
- MOSIL LUBRICANTS
- AVL INDIA
- HITACHI METALS
- COLDADGE INDIA
- ► ASHIRVAD PIPES
- BECTON DICKINSON
- BICELLI GECO HYDRAULICS
- RENEW SOLAR ENERGY
- VELODYNE LIDAR
- AGP WORLD WIDE OPERATIONS
- FUJITEC INDIA
- **BAXTER INNOVATIONS**





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