

(NABL Accreditation Certificate No. TC-10092)

### Dear Valued Customer,

Greetings from SamsACT Testing Services!

At SamsACT, we strive to provide leading technology, best quality and excellent testing services offering at reasonable pricing ...

## Facilities offered at SamsACT Testing Services (NABL Scope):

## **Thermal Cycling Test Chamber:**

Model: ARSF 680-15 Make: ESPEC, Japan Capacity (Volume): 680 Litres

Internal Test Space Dimensions: 850 (W) X 1000 (H) X 800 (D) mm

Temperature Range: (-)70 Deg C to (+)180 Deg C Humidity Range: 10% RH to 98% RH Heating Rate: 15 Deg C per minute Cooling Rate: 15 Deg C per minute





# **Thermal Shock Test Chamber:**

Model: TSA-203ES-W Make: ESPEC, Japan Capacity (Volume): 200 Litres Internal Test Space Dimensions: 650 (W) X 460 (H) X 670 (D) mm

Temperature Range: Cold Zone: 0 to -70 Deg C Hot Zone: + 60 to + 200 Deg C

Humidity Range: N/A Transfer Time: Less than 5 Sec Specimen Temp. Recovery Time: 5 to 10 min.

### Salt Spray Test Chamber:

Model: EQSS1000-P Make: Equilam, NA Capacity (Volume): 1000 Litres

Internal Test Space Dimensions: 1190 (W) X 820 (H) X 830 (D) mm Temperature Range: Ambient +5 Deg C to + 55 Deg C Bobble Tower Temperature Range: Ambient +5.0 Deg C to + 74 Deg C





<u>Combined System for Electro-Dynamic Vibration</u> <u>& Temperature – Humidity Test Chamber:</u> Make: IMV, Japan

Vibration Shaker Model: M060

Freq. Range: 0-3000 Hz Rated Force SINE : 600 N Random: 420 N Shock: 600 N Max. Acceleration: 50g Max Disp.: 30 mm p-p Max Load: 15 Kg

Chamber Model : SYN-1HA40 Capacity in Litre : 45 Litres (Volume) Internal Test Space Dimensions: 400 (W) X 400 (H) X 340 (D)mm

Temperature Range: -40 Deg C to + 120 Deg C Humidity Range : 30% RH to 98% RH Heating Rate: 2.0 Deg C per minute Cooling Rate: 1.0 Deg C per minute

### **Vibration Shaker**

Make: IMV, JapanVibration Shaker Model: i220Rated Force: 8 KNFreq. Range: DC to 3000 HzArmature Mass: 6.9 KgMax. Payload : 200 KgArmature Table Dia.: 190 mmSpecimen Mounting Screw Arrangement: M8 x 16 mm (17 no`s)

Rated Force SINE: 8 KN, Random: 5.6 KN

Freq. Range: 5 Hz to 3000 Hz Max. Accln.: 1159 m/sec2 (118 g) Max. Velocity: 2.2 m/sec Max. displacement: 51 mm P-P

Special Specifications with Head Expander (TBV-630S-i20-A, 38 Kg): Freq. Range: 5 Hz to 700 Hz Max. AccIn.: 178 m/sec2 (18 g)

Special Specifications with Slip Table (TBH-6-i20-A, 45 Kg): Freq. Range: 5 Hz to 2000 Hz Max. Accln.: 154 m/sec2 (15 g





Model: PST-300

Make: SHINYEI, Japan

SPECIFICATIONS:

Test sample table size: 100 mm Test sample max. weight: 800 grams Impact Acceleration range: 5g to 5000g Pulse duration range: 11 ms to 0.2 ms Shock Waveform: 1/2 sine wave Pendulum luring radius: 300 mm Anti rebound mechanism: Mounted Control System: Single – Turn & auto cycle operation Set count in auto Cycle: 4 digits One cycle in auto cycle: Maximum of 15 sec



MC-712 Temp. Test Chamber Test Temp. Range: -75° C to +100° C



Make: ESPEC, Japan

SH-241 Temp. & Humidity Test Chamber Test Temp. Range: -40° C to +150° C Humidity Range : 30% RH to 95% RH



Make: ESPEC, Japan



Make: Sam's, India

## COMBINED VIBRATION TEMPERATURE & HUMDITY TESTING (Non – NABL Scope) Make: SAMSACT (Using Additional Cabinet with ESPEC chamber & IMV Vibration Shaker)

- Vibration Testing for  $\checkmark$ 
  - SINE TEST up to 70g,
  - RANDOM TEST 14 grms &
  - **OMECHANICAL SHOCK TEST** up to 100g, 11 ms to 0.2 ms (Half SINE) Along with
- Temperature Range: (-) 60 Deg C to (+) 150 Deg C
- Humidity Range: 20% to 95%
- ✓ Internal Test Space Dimensions: 800 (W) X 800 (H) X 800 (D) mm





## Other Facilities/ Equipment offered at SamsACT Testing Services:

## <u>TACK TESTER – P3 (Non - NABL Scope)</u> Model: 80-29-01-0001 Make: Toyoseiki, Japan

The Tack Tester measures the adhesion or tack of rubber materials, adhesive tapes, sealants and other materials. Tack is defined as the force required to separate two sheet materials which are compressed together for a specified time. There are three primary factors which influence the behaviour of tack. These are contact pressure, temperature and contact time. Studies indicate contact time has the most significant impact in controlling tack of rubber. The Tack tester allows complete control of force and time. The unit also has an optional temperature sensor to verify temperature before testing.

#### **FEATURES:**

Measurement System: Load based, Max. Capacity: 100N Adhesion Measuring range: 0.0 and 30.0 N Resolution : 0.1 N Sample holder/ indenter weight set: dead weight, 2-5 N Weights included (1N weight increments) Optional weights available from 2-20N Sample holder/ Indenter up speed (Eight selectable speeds) Optional Sample surface temperature



### **Over all Test Facilities offered by SamsACT:**

#### **ENVIRONMENTAL TESTS (NABL Scope):**

- ✓ Thermal Cycling Tests from -70 Deg C to +180 Deg C with a Ramp Rate up to 15 Deg C per minute
- ✓ High Temp. Tests from Ambient to +180 Deg C
- ✓ Low Temp. Tests from Ambient to -75 Deg C
- ✓ Temp. Cyclic Tests from -75 Deg C to +180 Deg C
- ✓ Humidity Tests from 10% RH to 98% RH
- ✓ Temp. & Humidity Cyclic Tests
- ✓ Damp Heat Tests
- ✓ Tropical Exposure Tests
- ✓ Thermal Shock Tests from (Cold Zone:0 to -70 Deg C) (Hot Zone: +60 to +200 Deg C)
- ✓ Stability Chamber Tests
- ✓ Salt Spray & Corrosion Tests from Ambient +5 Deg C to +55 Deg C & up to 97% RH
- ✓ Temp. Oven from Ambient +10 to +300 Deg C

#### **DURABILITY TESTS (NABL Scope):**

- ✓ Vibration Testing for
  - $\circ$   $\,$  SINE TEST up to 70g ,
  - RANDOM TEST 14 grms &
  - MECHANICAL SHOCK TEST 5g to 5000g, 11 ms to 0.2 ms (Half SINE)

#### COMBINED VIBRATION TEMPERATURE & HUMDITY TESTING (Non – NABL Scope):

- ✓ Vibration Testing for
  - SINE TEST up to 70g ,
  - RANDOM TEST 14 grms &
  - MECHANICAL SHOCK TEST up to 100g, 11 ms to 0.2 ms (Half SINE)

#### Along with

- ✓ Temperature Range: (-) 60 Deg C to (+) 150 Deg C
- ✓ Humidity Range: 20% to 95%

**POLYMER PRODUCTS (Non – NABL Scope):** 

✓ Tackiness Testing for Polymer Products

#### **NOTEs:**

- We can conduct cold testing up to (-) 100 Deg C with higher ramp rates up to 50 DegC per minute using Liquid Nitrogen injection.
- We also have a NABL Accredited Calibration Lab (Accreditation Certificate No. CC-2943) which follows ISO 17025 standards to test the parameters such as
  - Thermal Calibration: Environmental Chambers Temperature and Humidity.
  - Mechanical Calibration: Accelerometers, Hand Held Shakers, Vibration Controllers, Vibration Shakers, Vibration Meters, Shock & Bump test machines.

✓ We also undertake repairing of Accelerometers and its associated cables with BNC & Microdot Connectors

We are hereby inviting you to visit our Test & Calibration labs and we shall be pleased to offer our best services to meet your requirements.