Structural Solutions Private Limited

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Innovations On The Products Of WUT

Weiss Umwelttechnik GmbH, Germany is one of the most important producers of standard testing chambers and systems for environmental simulation worldwide. The product range comprises temperature and climate testing systems as well as test systems for simulated exposure to weather, temperature shock, corrosion and for long-time testing in various test chamber volumes. Walk-in /drive-in chambers and process-integrated plants for environmental simulation and biology are designed, produced and installed in accordance with customer specifications. Weiss Umwelttechnik is certified according to DIN EN ISO 9001.

Structural Solutions Private Limited is the authorized exclusive Indian representative of "Weiss Umwelttechnik Gmbh". Structural Solutions Private Limited is a professional Engineering Company engaged in offering high-end technology-intensive products and systems solutions for the complete range of "Environmental Chambers".



Environmental Test Chambers

Standard Chamber WT/WK 2000 /

The standard Chamber WT/WK 2000 is the extension of WT/WK 1500. In addition to special doors, the depth of the test chamber has also been extended.

The depth has been extended from 1500 to 2000 mm and this chamber is now standardized.



Test Space Volume: 2000 mm

Chamber Inner Dimensions: H950 x W1100 x D2000

Working Range

- Temperature range: -70 to +180 °C (discontinuously)
- Cooling-down rate: 2.3 K/min (+80 to -35 °C)
- Heating-up rate: 3.5 K/min (-40 to +80 °C)

Connection Data

- Water-cooled refrigeration unit: R404A
- Power supply: 400V, 50Hz
- Connected load: 14 kW

MAST Systems

The latest developments in the Automotive Industry calls for the testing of body components or instrument panels under the influence of temperature and humidity with simultaneous moving/acceleration.

In order to comply with these developments Multi Axis Shaker Table

been developed by Wiess Umwelttechnik.

(MAST) has

The three different types of MAST systems Now Available

System 22602178

Walk-In Temperature Test Chamber Type 40'/ 40 IU prepared **for** installation of a 6-Axial-Shaker Table.

Technical Data

Chamber outside Dimensions: H 3240 x W 4040 x D 4240 mm **Chamber Equipment:** Double-wing door with window, illumination, chamber with 2 ports for measuring cables, HC gas detection system, ports for shaker table cylinder rods.

Chamber Materials

- Outside wall: galvanised steel plate,
- Inside wall: aluminium, sealed with silicon, insulation 120 mm PU-foam, floor load 30.000 N/m².

Working Range

- Temperature range: -40 to +80 °C (discontinuously)
- Temperature constancy ±1 K (in time)
- Cooling-down rate: 0.5 K/min (+80 to -35 °C)
- Heating-up rate: 0.5 K/min (-40 to +80 °C)
- Specimen mass: 100 kg
- Outer air volume 500 m³/h

Connection Data

- Water-cooled refrigeration unit: R404A
- Power supply: 400V, 50Hz
- Connected load: 42 kW
- Fuse on site: 80A

System 22603524

Temperature and Climate Test Chamber for MAST System Type WK 9B/30-90/Vi

Technical Data Chamber Outside Dimensions: H 2585 x W 3350 x D 3670 mm



Chamber Equipment: Bellows, (H 2565 x W 2750 x D 3270 mm) 2 zippers, 2 DN100 ports for measuring cables.

Chamber Materials: Ceiling made of aluminium, inside wall stainless steel plate, internal sealing welded steam-tight, sealing outside silicone, insulation 120 mm PU-foam, MAST Table as floor, side walls bellows.

Working Range

- Temperature Range: -30 to +90 °C (discontinuously)
- Temperature constancy ±1 K (in time)
- Cooling-down rate: 1 K/min
- Heating-up rate: 1 K/min
- Climate: +20 to +60 °C
- Temperature constancy ±1 K (in time)
- Humidity range without heat load: 50 to 80 % RH
- Humidity constancy 3 to 5 % RH (in time)
- Dew point temperature range: +10 to +55 °C

Connection Data

- Water-cooled refrigeration unit: R404A
- Power supply: 400V, 50Hz
- Connected load: 52 kW

System 22604640 /

Walk-In Climate Chamber Type WK 55B/30-95Vi

Technical Data

Chamber Outside Dimensions: H 2900 x W 4240 x D 4740 mm

Additional floor recess 1250 mm

Chamber Equipment:

Double-wing chamber door, electrically operated gate in

ceiling (for loading), personnel door with window, wall window, removable floor element, bellows (sealing between mounting plate and cell floor), halogen illumination, three ports (100 mm each), surface-flush C-rails in side walls.

Working Range

- Temperature: -30 to +95 °C (discontinuously)
- Temperature constancy: ±1 K (in time)
- Cooling-down rate: 0.5 K/min (+80 to -30 °C)
- Heating-up rate: 0.7 K/min (-30 to +80°C)
- Specimen mass: max. 1000 kg / 0.15 Wh/kgK
- Climate: +10 to +90 °C
- Temperature constancy: ±1 K (in time)
- Humidity range without heat load: 10 to 95 % RH
- Humidity constancy: 5 % RH (in time)
- Dew point temperature range: +4 to +77°C
- External air: Approx. 60m³/h between +10...+55 °C (continuous)

 Control: S!MCON/32*-NET with colour touch panel ,PC system S!MPATI

Connection Data

- Water-cooled refrigeration unit: R404A
- Power supply: 400V, 50Hz
- Connected load: 83 kW
- Fuse on site: 3x160A

Combined Climate/Temperature/Corrosion Testing

Climate-Alternating-Corrosion-Chamber combines the climate and corrosion tests. Salt mist and climate tests in automated change are possible with this chamber. The system contains a climate test chamber in which all the inside materials as well as the sensors are in corrosion-resistant plastic material.



The following tests can be realized in the test chamber:

- Climate tests between +20 and +60 °C, RH adjustable b e t ween 10 and 95 %; ±3 to5% RH
- Salt mist tests DIN 50 021
- Condensed water test climate according to DIN 50 017 and diverse corrosion alternating tests in the above mentioned climate working range, e.g.VDA 621-421, Nissan-Test, PVW-Test 1210, Volvo-Test STD 1027, 1375.

WTL/WKL Base Option /

The chamber with 100 liter needs no longer a base as a standard as the refrigeration cascade for temperature upto 60° C is integrated into the housing of WTL/WKL 100

Summary of WTL/WKL series with/without base options:

WTL/WKL 34/40 (+10), without base as standard (base as option)

 WTL/WKL 34/60, with base as standard (no option possibilities)

 WTL/WKL 100/40 (+10), without base as standard (base as option)

 WTL/WKL 100/60, without base as standard (base as option)



Complete range of Temperature and Climate testing Systems, Test systems for simulated exposure to weather, Temperature, Shock, Corrosion, Walk-in /drive-in Chambers will be offered in Rupees or in Foreign Exchange at competitive prices by **Structural Solutions Private Limited**

For further product & application details please contact:

Structural Solutions Private Limited

Sug 9,ls Ban

Sugnana, Ist Floor 9,Ist Main Road, Ganganagar Bangalore -560 032

Ph: 080-2354 8889 Fax: 080-2354 7505 Email:bangalore@stsols.com

Kolkata

Bangalore

51/3B,Karaya Road First Floor Kolkata Pin-700 019 Ph:033-2247 2993,2283 6735 Fax:033-2283 6734 Email:kolkata@stsols.com

Chenna

Saijothi, A-F1, 1,3rd Street Satyavathi Nagar Officer's Colony, Anna nagar West Extn., Chennai -600 101 TeleFax 044 - 2654 9409 Email: chennai@stsols.com

Hyderabad (Head office)

301 & 303 - Eldorado Estate, 3-6-526 Himayath Nagar, Hyderabad-500 029 Ph:040-2763 6433 , 2762 0569 Fax:040 -2763 6435 Email:sales@stsols.com

Delh

6478, Sector C, Pocket 6 & 7 Vasant Kunj,New Delhi-110 070 Ph: 011 - 4176 7790 Fax:011- 4176 7791

Fax :011- 4176 7791 Email:delhi@stsols.com



Pune

Block: II, Office No: 502, Fifth Floor, Lloyds Chambers 409, Mangalwar Peth Pune: 411 011

Ph:020 26050334 Cell. 93733 13907 Email: pune@stsols.com

Email: sales@stsols.com, URL: www.stsols.com