



Vacuum and Ultravacuum Chambers

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Weiss Umwelttechnik GmbH is one of the most important producers of standard test devices and special test systems for Environmental Simulation Technology worldwide.

Along with other Schunk Group companies like Vötsch Industrietechnik GmbH in Germany, WVC in China, Servathin, Secasi & Climats in France, Envirotronics in the USA, Weiss Gallenkamp & Design Environmental in the UK, it is one of the major companies in Europe.

Altitude/Vacuum simulations:

Standard Vacuum/Altitude simulation chambers



Vacuum Chamber fitted with shrouds

Capacity: Available in 150, 300, 500, 1000 & 1350 ltrs

Temperature range: Available in -40°C & -70°C options

Humidity range: 10% to 95% RH in the temperature range of 10°C to 95°C.

Altitude range: Up to 1mbar

To simulate temperature conditions in vacuum / altitude conditions, **shrouds** are provided optionally

Environmental Stress Screening(ESS) Chamber with Altitude Vessel

Another cost saving way of conducting minimal Altitude test is to use removable Altitude vessels inside an ESS chamber to conduct ESS tests as well as Altitude tests.

Various combinations possible to suit customer's requirements :

300ltrs ESS chamber upto 25°C/min with 80ltrs altitude vessel

500ltrs ESS chamber upto 25°C/min with 180ltrs altitude vessel

1000ltrs ESS chamber upto 25°C/min with 300ltrs altitude vessel



ESS Chamber with removable Altitude Vessel

Vacuum Oven



Table Top Vacuum Oven

Vacuum ovens are available in 4 volumes, from 20 to 240 litres.

Temperature range : from (20°C above ambient) up to 200°C; 300°C being available optionally

Inside pressure is indicated by an analog vacuum meter.

As an option, a piezoelectric probe can digitally display the pressure with a 1mbar resolution.

Technology News

Weiss now unveils the Ultra-Vacuum Standard Chambers to Defence, Aeronautic & Space Industries

Space Simulator with Infrared lightning (20m^3 1.10^{-7} mbar -135°C / $+150^\circ\text{C}$ Infrared lighting)



Application: Temperature, Light and Vacuum testing for Satellites, Space Simulation
Lighting IR : 2500 W/m^2 Dimensions : Depth 3000mm and Length of $\varnothing 2300\text{mm}$

Operation Mode: Tests on satellites, subject to conditions in space to assess reaction components. In the testing chamber, both temperature and radiation can be regulated independently in six different zones, simulating different conditions the satellites are faced with during orbiting.

Features: The Space Simulator is fully controlled with the Weiss Group Software "Spirale Vs". Beside this the software creates a transcript of the simulation.

Benefits: Recognized know-how through projects with THALES-COBHAM-RADIALL

Ultra Vacuum Standard Chamber 10^{-6} mbar – 1.3m^3 Hot Cold Vacuum : -30°C / $+100^\circ\text{C}$

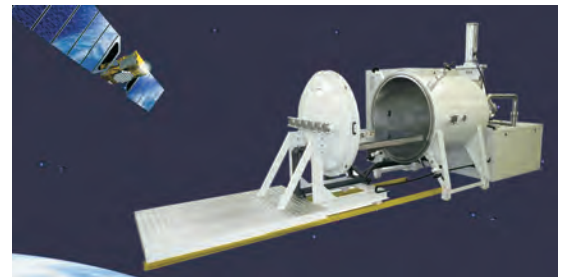
Application : Simulation of Spatial Conditions
(Aeronautic Industry)

Monobloc unit comprising of:

- Cylindrical Chamber with horizontal movement for access
- Single Chassis with machinery and pumps installed
- Electrical cabinet with Control Panel

Length $\varnothing 1200\text{mm}$

Depth of 1200mm



Mini Ultra Vacuum Standard Chamber 10^{-5} mbar– 200dm^3 Hot Cold Vacuum : -35°C / $+85^\circ\text{C}$



Application : Simulation of Spatial Conditions
(Aeronautic & Space Industry)

Monobloc unit comprising of:

- Cylindrical Chamber
- Single Chassis with machinery and pumps installed
- Electrical cabinet at the rear of the machine

Length $\varnothing 600\text{mm}$

Depth of 600mm

➔ Detailed technical & applications information on request, Please contact:

Structural Solutions Private Limited

Hyderabad Office: 3-6-271, Second Floor, Sudheer Tapani Towers, Himayath Nagar, Hyderabad-500 029
Phone: +91-40-2322 2380 /81 / 82 /83 Fax: +91-40-2322 2384 E-Mail:sales@stsols.com

For Service hotline call Toll free no-1800-425-2385

Bangalore
080-2354 8889

Chennai
044-2654 9408

Delhi
011-4176 7790

Kolkata
033-2462 5429

Mumbai
9322057333

Pune
020-25530540

Trivandrum
9349026213