



TESTCENTER

DEVICE LIST ENVIRONMENTAL SIMULATION



We test comprehensively and reliably, and with our wide range of equipment we guarantee results.

Shaker RMS	Technical data	Areas of application
	<ul style="list-style-type: none"> • Peak force 17660 N • Frequency range 5–2000 Hz • Displacement pk-pk ± 12.7 mm • Max. load 300 kg • Connectable horizontal table 	<ul style="list-style-type: none"> • Vibration and shock tests • Transportation tests • Simulation of in-use stresses
Shaker LDS	Technical data	Areas of application
	<ul style="list-style-type: none"> • Peak force 22200 N • Frequency range DC –3000 Hz • Displacement pk-pk ± 25.4 mm • Max. load 350 kg • With a temperature range from -70°C to $+150^{\circ}\text{C}$ • Connectable temperature chamber 	<ul style="list-style-type: none"> • Vibration and shock tests • Transportation tests • Simulation of stresses during use • All tests can be carried out with various temperatures applied

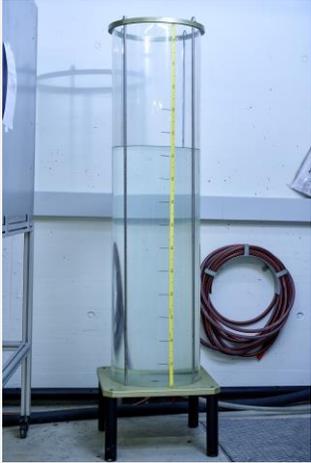
1000 liter temperature chamber	Technical data	Areas of application
	<ul style="list-style-type: none"> • Temperature range -70°C to +150°C • Heating rate 3 K/min on average • Cooling rate +150°C to +20°C: 6 K/min • Cooling rate +20°C to -60°C: 4 K/min • Usable testing space 1040 x 880 x 670 mm • Max. test specimen weight 200 kg • Connectable with shaker • Additional compressed air dryer available 	<ul style="list-style-type: none"> • Temperature tests • Testing of storage and operating conditions • Accelerated ageing by means of cycle tests
600-liter climatic chamber	Technical data	Areas of application
	<ul style="list-style-type: none"> • Temperature range -70°C to +180°C • Heating rate 2.5 K/min on average • Cooling rate 2.5 K/min on average • Climatic range +10°C to +90°C with 10% rh to 98% rh • Dew point range +5°C to +89.5°C • Usable testing space 645 x 645 x 625 mm • Max. test specimen weight 100 kg • Additional compressed air dryer available 	<ul style="list-style-type: none"> • Climatic tests • Testing of storage and operating conditions • Accelerated ageing by means of cycle tests • Humidity aging

500-liter stress-screening chamber	Technical data	Areas of application
	<ul style="list-style-type: none"> • Temperature range -70°C to +180°C • Heating rate 10 K/min on average • Cooling rate 10 K/min on average • Climatic range +10°C to +95°C with 10% rh to 98% rh • Dew point range I +7°C to +94°C • Dew point range II -10°C to +7°C • Usable testing space 640 x 625 x 515 mm • Max. test specimen weight 100 kg • Additional compressed air dryer available 	<ul style="list-style-type: none"> • Climatic tests • Testing of storage and operating conditions • Accelerated ageing by means of cycle tests • Humidity aging
Climatic chamber	Technical data	Areas of application
	<ul style="list-style-type: none"> • 64-liter climatic chamber • Temperature range -70° to +180°C • Heating rate 4 K/min on average • Cooling rate 4 K/min on average • Climatic range +10°C to +93°C with 10% rh to 95% rh • Dew point range +5°C to +93°C • Extended dew point range -20°C to +93°C • Additional compressed air dryer available • Usable testing space 430 x 390 x 330 mm • Max. test specimen weight 10 kg per rack, max. 50 kg total weight 	<ul style="list-style-type: none"> • Climatic tests • Testing of storage and operating conditions • Accelerated ageing by means of cycle tests • Humidity aging

Walk-in climatic chamber	Technical data	Areas of application
	<ul style="list-style-type: none"> • Temperature range -65°C to +85°C • Heating rate 1 K/min on average • Cooling rate 0.4 K/min on average • Climatic range +10°C to +70°C with 10% rh to 95% rh • Dew point range +5°C to +69°C • Usable testing space 2100 x 1800 x 1900 mm • Door 950 x 1900 mm • Chamber floor load capacity 10000 N/m² • Additional compressed air dryer available 	<ul style="list-style-type: none"> • Climatic tests • Testing of storage and operating conditions • Accelerated ageing by means of cycle tests • Humidity aging • Testing of large devices • Application testing at high and low temperatures

Rain test system	Technical data	Areas of application
	<ul style="list-style-type: none"> • Test system for IPX3 and IPX4 • Configuration: sprinkler in accordance with EN 60529 	<ul style="list-style-type: none"> • Testing for watertightness • Rain from above • Spray water from all sides

Water jet system	Technical data	Areas of application
 <p>A photograph of a water jet testing system. It consists of a black metal base with a vertical silver rod. A black high-pressure hose is connected to a nozzle assembly at the top of the rod. The nozzle is angled upwards and to the left. A yellow electrical cable is also connected to the nozzle assembly. The background is a white wall.</p>	<ul style="list-style-type: none"> • Test system for IPX5 and IPX6 	<ul style="list-style-type: none"> • Testing for water-tightness • Water jets • Strong water jets

Immersion tube	Technical data	Areas of application
 <p>A photograph of an immersion tube. It is a tall, clear cylindrical tube with a yellow vertical scale on its side. The tube is filled with water and sits on a small black wooden stool. In the background, there is a white wall and a coiled red hose.</p>	<ul style="list-style-type: none"> • Equipment for IPX7 and IPX8 • Diameter 380 mm • Maximum immersion depth 1500 mm 	<ul style="list-style-type: none"> • Testing for water-tightness • Water-tightness of housing when submerged

Chest-style salt spray chamber	Technical data	Areas of application
	<ul style="list-style-type: none"> • Testing space 70 x 50 cm; depth 60 cm • Testing space volume including lid 600 l • With climate function • Chamber for neutral salt-spray tests 	<ul style="list-style-type: none"> • Testing for corrosion resistance • Comparative testing of anti-corrosion coatings
Vacuum chamber	Technical data	Areas of application
	<ul style="list-style-type: none"> • Pressure range 54 mbar to approx. 1100 mbar • Chamber diameter 890 mm • Chamber length 800 mm • Electrical feedthroughs • USB connection in chamber • Optical window • Field-attachable flange for individual data cables (on request) 	<ul style="list-style-type: none"> • Vacuum tests • Testing of device functionality at high altitudes