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Company Overview

- ◆ Specializing in Test Equipments since 2000;
- ◆ Products for temperature, humidity, salt corrosion, liquid pressure vibration, altitude, IR(Solar)-simulation, rain and dust test;
- ◆ Brands include Zundar, Haiying;
- ◆ Based in Shanghai, China;
- ◆ Founded in 1979 as Shanghai Haiying Refrigeration Equipment Co., Ltd, and was reorganized into Shanghai Zengda Environmental Test Equipment Co., Ltd in 2000;



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Company Overview

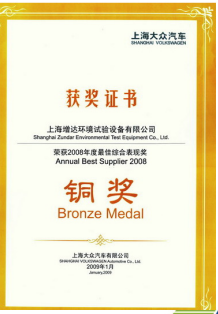
- ◆ **Our Mission:**
Providing products and service beyond customer expectation, realizing company and employees value;
- ◆ **Our Vision:**
Being a leader among testing equipment suppliers in China;
- ◆ **Our Core Value:**
Customer first, People foremost, Value Creation, Challenge, Professional and standardization, Teamwork.



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Company Overview

- ◆ ISO9001:2000 certificated since 2002;
- ◆ Achieved ISO14001 and OHSAS18001 certification in 2008;
- ◆ Awarded Best Supplier of Volkswagen in 2008.





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Company Overview

Head Office Factory	Subsidiary & Support Offices	Indirect Sales & Support Offices	Collaborator
-Jiading district, Shanghai, China -85 staff members -Production -Product development -Marketing	-Future testing, Hongkong -Shanghai Meizeng -Changchun Meizeng -Downtown, Shanghai, China -Changchun, China -Beijing, China	-Controltecnica, Madrid, Spain -TEKNIS, Iran -Perani, Italy -IMP, South Africa -HEKTO, Turkey -Bluestar, India -EMT, Russia -BENK, Thailand -Sonic, Egypt -dpUNION, Brazil -Nihon Denkei, Japan	-Hude, Germany -Microsys, Canada -Mitronic, Germany -BF-engineering, Germany -MTS, USA -Sinotec, Germany -DTE, USA



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Shanghai Facility



- ◆ 7500 square meters (80000 sq. ft.) including lab, production and office;
- ◆ Located in Jiading District, just outside of Shanghai downtown.



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Company Overview

◆ Office



◆ Assembling workshop



◆ Testing lab



◆ Metal machining factory



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Customer References

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Standard product



◆ Walk-in climate chamber



◆ Salt corrosion chamber



High-low temperature and humidity test chamber



◆ Rain simulation and water-spray chamber



◆ Vacuum test chamber



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Standard product



◆ Aging test chamber



◆ Dust test chamber



◆ Temperature shock chamber



◆ Temperature, humidity and vibration integrated test chamber



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Other Product for automotive industry

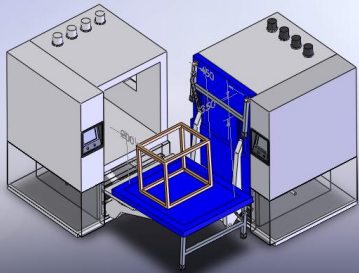


- ◆ Airbag test chamber for both inside and outside airbag ignition test;
- ◆ Temperature ranger: -40°C to 110 °C; All seams were continuous heliarc welded;
- ◆ With automatic sliding door and solid sliding platform. The period from door moving to platform arrived static position is less than 7 second;

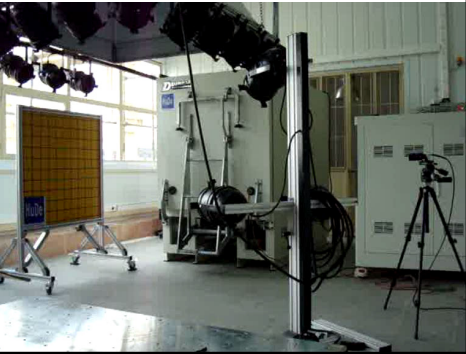


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Product for automotive industry



- ◆ Airbag test chambers for DAB,PAB;
- ◆ With auto-rotation door, the period from door opening to ignition completed is less than 10 second.
- ◆ Two chambers spared same ignition position.



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Product for automotive industry

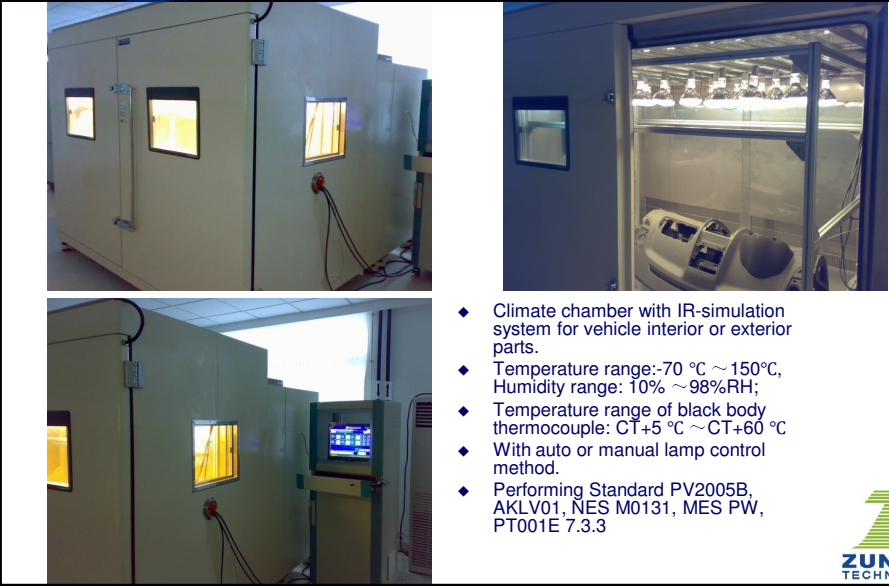


- ◆ Airbag test chambers for curtain airbag;
- ◆ With auto-rotation door, the period from door opening to ignition completed is less than 10 second.



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Product for automotive industry



- ◆ Climate chamber with IR-simulation system for vehicle interior or exterior parts.
- ◆ Temperature range: -70 °C ~ 150°C, Humidity range: 10% ~ 98%RH;
- ◆ Temperature range of black body thermocouple: CT+5 °C ~ CT+60 °C
- ◆ With auto or manual lamp control method.
- ◆ Performing Standard PV2005B, AKLV01, NES M0131, MES PW, PT001E 7.3.3



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Product for automotive industry

◆ Testing standard:
 TL52361, TL52361, GB/T20025.2, JLS30006-2
 OCT.664, GB/T5563-2006/ISO 1402:1994,
 GB7309-87





- ◆ Pressure fluctuation test instrument for radiator, oil and water pipe;
- ◆ Chamber temperature range:-70 °C ~ + 130°C, Liquid temperature range: +25 ~ +130 °C ,Pressure range: 0.1Mpa ~0.5Mpa, Frequency range: 0.1 ~2Hz, Flux range: 0 ~12m³/h;
- ◆ Pressure profile: Trapezoidal wave、 Triangular wave and sine wave.
- ◆ Performing Standard TL874, TL680, TL52361.



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Product for automotive industry





- ◆ Radiator, oil and water pipe test system;
- ◆ Chamber temperature range:-70 °C ~ + 130°C, Liquid temperature range: -70 ~ +130 °C , Flux range: 4 ~40l/min, Compressed air setting pressure: 0.05-0.4Mpa;
- ◆ Performing with cold airproof test, thermal shock test, cold liquid-proof test, cold-heat liquid cycle test.



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Product for automotive industry



- ◆ High-low temperature chamber for configuring with material test machine, shock absorber test machine, rotational test machine etc;
- ◆ Temperature range: -70 °C ~ + 180°C;
- ◆ Compressors are separated with chamber body to avoid vibration caused by compressors. Chamber body can move smoothly in horizontal direction;
- ◆ Convenient configuration for assembling with test machine;
- ◆ Mul-point control to switch temperature control point from air temperature to sample temperature.



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Product for automotive industry



- ◆ Climate chamber with vibration test for dash board assembly;
- ◆ Temperature range:-40 °C ~ 100°C, Humidity range: 25% ~ 98%RH; horizontal and vertical vibration test;
- ◆ Chamber can move into test position automatically in horizontal and vertical direction;
- ◆ All seams were continuous heliarc welded;
- ◆ Performing Standard PV2005,PV1200, AKLV01.



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Product for automotive industry



- ◆ Salt corrosion chambers;
- ◆ CE certificated;
- ◆ Performing standard DIN50021, DIN50017, DIN50014;
- ◆ Exported to Europe since 2005.



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Product for automotive industry



- ◆ Walking climate chamber for accessories of automobile;
- ◆ Temperature range:-70 °C ~150°C, Humidity range: 10% ~ 98%RH;
- ◆ All seams were continuous heliarc welded.
- ◆ Performing Standard PV2005,PV1200.



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Product for automotive industry



- ◆ Walking climate chamber for automobile test;
- ◆ Temperature range:-40 °C ~100°C, Humidity range: 25% ~98%RH;
- ◆ All seams were continuous heliarc welded.
- ◆ Performing Standard PV2005,PV1200.



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Product for automotive industry



- ◆ Walking climate chamber for automobile test;
- ◆ Temperature range:-40 °C ~100°C, Humidity range: 25% ~98%RH;
- ◆ All seams were continuous heliarc welded.
- ◆ Performing Standard PV2005,PV1200.



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Product for automotive industry



- ◆ Walking climate chamber for accessories, airbag and whole-car test;
- ◆ Temperature range:-40 °C ~ 100°C, Humidity range: 25% ~ 98%RH;
- ◆ With auto-sliding door and solid sliding platform;
- ◆ Performing Standard PV2005,PV1200.



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Product for automotive industry

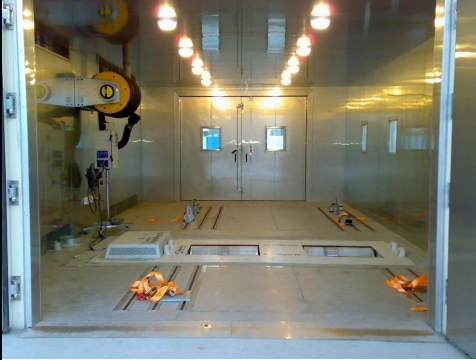


- ◆ Walking climate chamber for accessories, airbag and whole-car test;
- ◆ Temperature range:-40 °C ~ 100°C, Humidity range: 25% ~ 98%RH;
- ◆ Two zone connected together with seperated control;
- ◆ With dry air purge system.



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Product for automotive industry

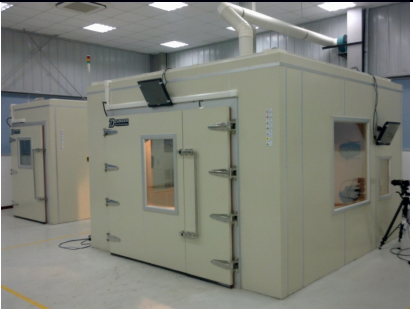


- ◆ Walking climate chamber for ignition, engine power and exhaust test;
- ◆ Temperature range: -40 °C ~ 100°C;
- ◆ With fresh air compensating test.



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Product for automotive industry



- ◆ Walk-in climate chamber for vehicle interior parts climate aging test and air-bag test;
- ◆ Temperature range: -50 °C ~ 110°C, Humidity range: 25% ~ 98%RH;
- ◆ Two chambers share same refrigeration system;
- ◆ With auto up-down sliding door and platform;
- ◆ With dry air purge system;
- ◆ Integrating with air-bag test system.



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Product for automotive industry






- ◆ Temperature range: -40 °C ~ 90°C, Humidity range: 20% ~ 98%RH;
- ◆ Solar simulation irradiance: 500 W/m²~1200 W/m²;
- ◆ Solar Zone Control: Front, center, rear, side Left, side right 5 section controllable;
- ◆ With dry air purge system;
- ◆ According to MIL-STD-810, EPA, DIN75220 etc;



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Product for automotive industry

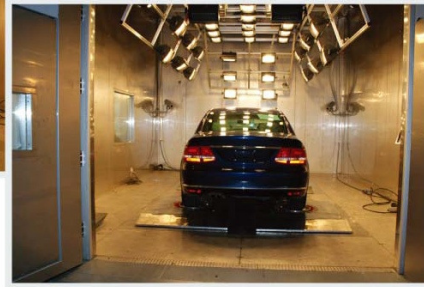





- ◆ Walk-in climate chamber for cold start and air conditioner performance test;
- ◆ Temperature range: -40 °C ~ +50°C, Humidity range: 25% ~ 98%RH;
- ◆ Exhaust and dry air compensation system;
- ◆ Integrated with fire protection and real-time monitor system;



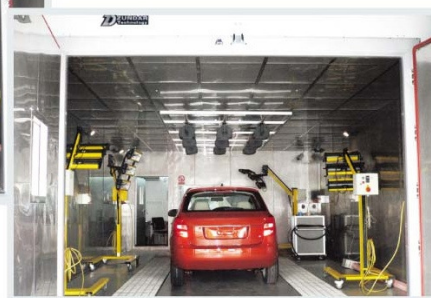
Product for automotive industry



- ◆ Walk-in climate chamber with 4 posters;
- ◆ Temperature range: -40 °C ~+100°C, Humidity range: 25% ~98%RH;
- ◆ IR simulation system



Product for automotive industry



- ◆ Walk-in climate chamber for VOC test;
- ◆ According to Standard ISO/TC 146/SC 6+ISO/TC 22/, HJ/T 400-2007 and JAMA standard;



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Product for automotive industry



- ◆ Walking climate chamber for automobile test;
- ◆ Temperature range:-40 °C ~100°C, Humidity range: 25% ~98%RH;
- ◆ All seams were continuous heliarc welded;
- ◆ Performing Standard PV2005,PV1200;
- ◆ Big view window for operator observing test situation;
- ◆ Control room separated from power room to keep noise away from control room;
- ◆ Big LED displayer as slave displayer for operator check chamber operation condition at a distance.



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Walk-in chambers for automotive industry



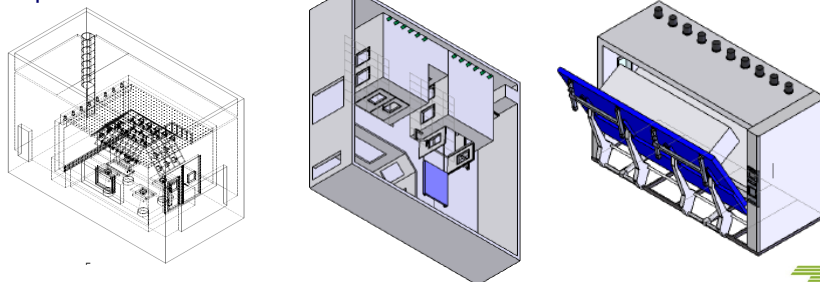
Technical Force

- ◆ Shanghai Zundar inherit the strong ability of Shanghai Haiying Refrigeration Facilities Factory in refrigeration area and developed technology in multi-stage refrigeration with single compressor. We can manufacture deeply low temperature chamber whose lowest temperature is -120 °C with mechanically compressing refrigeration system. Contrary to the traditional deeply low temperature chamber with liquid nitrogen refrigeration system, our chamber decrease the running cost dramatically and have better operation performance convenience.



Technical Force

- ◆ We are to establish a digital company and construct PDM system. With the help of the likes of Solidwork and Autocad Eletrical, we can make electronic prototype before manufacturing to simulate the structure and assembling of mechanical parts and sheet metal, so we can reduce the design error and shorten the design period.



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