

XENON ACCELERATED WEATHERING TEST CHAMBER - TORONXTC™ -1000H



Xenon Accelerated Weathering Test Chamber - ToronXTC™-1000H is a high-performance xenon aging test chamber designed to simulate the damaging effects of full-spectrum sunlight, heat, and humidity. It reproduces the aging impact of months or years of outdoor exposure within days or weeks, providing rapid and reliable results.

APPLICATIONS

Standards

1. **ASTM D3451**: Testing of Coating Powders and Powder Coatings
2. **ASTM D3794**: Testing of Coil Coatings
3. **ASTM D6577**: Testing Overview for Industrial Protective Coatings
4. **ASTM D6695**: Xenon Arc Exposure of Paints and Related Coatings
5. **ASTM G151**: Nonmetallic Materials Exposure Overview
6. **ASTM G155**: Xenon Arc Test Equipment for Exposure of Non-Metallic Materials
7. **ISO 4892**: Plastics - Laboratory Light Exposure Methods
8. **ISO 16474-2**: Paints and Varnishes - Artificial Aging and Exposure to Radiation from Filtered Xenon Lamps
9. **JKS K 5600-7-7**: Test Methods for Coatings - Part 7: Accelerated Weathering Test (Exposure to Filtered Xenon Arc Lamp Radiation)



Advantages

1. **Advanced Xenon Lamp Technology:** Utilizes a 1.8 KW air-cooled long arc xenon lamp for precise and reliable testing.
2. **User-Friendly Design:** Engineered for ease of use, ensuring the best sample loading experience.
3. **Versatile Testing Capabilities:** Fully equipped for weathering, colorfastness, and lightfastness tests, adhering to all major industry standards.
4. **Cost-Effective Operation:** Offers an economical solution with low purchase and operating costs.
5. **High-Quality Equipment and Services:** Provides premium aging test machines alongside professional testing services.
6. **Comprehensive After-Sales Support:** Backed by an experienced team for installation, maintenance, training, and consulting.
7. **Simplified User Interface:** Intuitive and easy to program, saving time and effort during operation.
8. **Durable Xenon Lamps:** Long-lasting lamps with a service life of up to 1,500 hours, offering excellent value.
9. **Customizable Filters:** Offers a variety of optical filter options, meeting diverse domestic and international testing standards.

This chamber is designed to deliver top-tier performance while remaining cost-effective, making it an ideal choice for advanced testing applications.

FEATURES

- U.S.-made xenon light source and original filter simulate the full spectrum of sunlight for realistic and optimal testing conditions.
- Stable light source ensures reliable, reproducible test data.
- Xenon lamp has a service life of up to 1500 hours, with indicators meeting the highest international standards.

- Optional filters available: UV extension filter, daylight filter, or window glass filter, compatible with multiple domestic and international testing standards.
- Precise control over irradiance and temperature, with the Black Panel temperature adjustable to the desired level. Irradiance control is independently adjustable.
- Real-time data collection and storage: Test data is automatically recorded in EXCEL format and can be exported via USB drive for fully unattended operation.
- Touch screen interface with user-friendly controls allows operators to set test parameters and monitor the process status in real time.
- High-precision Pt 100 Black Panel temperature sensor and black mark temperature sensors automatically control the sample room temperature (room temperature to 90°C).
- Alarm protection functions for large irradiance errors, over-temperature, and heating overloads.
- Accelerated aging: The test chamber exposes samples to equivalent summer noon sunlight, 24 hours a day, rapidly aging the sample.
- Affordable solution with low purchase price, low lamp costs, and minimal operating expenses, making Xenon arc testing accessible to even small labs.

TECHNICAL SPECIFICATIONS

Specification	Details
Xenon lamp	1.8KW air-cooled long arc Xenon lamp(Made in US)
Filter	UV extension filter (can also choose daylight filter or window glass filter)
Exposure area	1000 cm ² (9 pieces of 150mm×70mm standard samples can be exposed to the sun at one time)
Irradiance monitoring point	340nm, 420nm, 300nm~400nm (optional)
Irradiance range	0.3W/m ² ~0.8W/m ² (340nm) 0.5W/m ² ~1.35W/m ² (420nm) 30W/m ² ~100W/m ² (300nm~400nm) 200W/m ² ~1000W/m ² (280nm~800nm)

Specification	Details
Lamp life approx.	1800 hours
Black Panel Temperature range	RT~90°C
External Dimensions	1000mmx650mmx1020mm
Weight approx.	135kg
Voltage	220V, 50Hz or 60Hz (110V is also available)



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

