

# OZONE CHECK-UV

## SOFTWARE CONTROLLED OZONE CABINET FOR THE EVALUATION OF OZONE RESISTANCE OF RUBBER SAMPLES

STANDARDS: ASTM D1056; ASTM D1149; ASTM D1171; ASTM D4575; DIN 53\_509-1; EN 681-1; FIAT 50417; ISO 3011; ISO 7326; ISO 7840; ISO 12046; ISO 1431-1; ISO 1431-3; ISO 6916-1; ISO 6916-2; JIS K\_6259; SAE J1401;

NOTE: COMPLIANCE WITH SOME STANDARDS MAY REQUIRE OPTIONAL ACCESORIES OR SETUPS.



**gibitre**<sup>®</sup>  
INSTRUMENTS

Complete ozone cabinet for the measurement of the resistance to cracking under static or dynamic tensile strain of rubber samples or technical articles. The instrument permits to set the test conditions in order to comply with international standard methods.

### Key features

- Automatic regulation of Ozone Concentration, Temperature and Air Flow
- Performance of Static or Dynamic tests

- UV-absorption Ozone detector
- Stainless steel cylindrical test chamber for homogeneous ozone distribution
- Generation and shooting down of the Ozone in closed circuit (no exhaust evacuation needed)
- CE labelling

### Software

Complete control using Gibitre-OzoneCheck software which permits to set testing conditions, store results, test curves and sample images to SQL

database, manage independent groups of samples with automatic test stop and test suspensions control, recovery the test after a power failure.

### Accessories

- Supports for static and dynamic tests of standard samples, technical parts and rubber hoses.
- Optional sensor for measuring relative humidity during the test

**Temperature control (standard instrument):** From Room Temperature +5°C to 70°C. Accuracy: 0.1°C.

**Control of Ozone Concentration:** Automatic between 10 and 500 PPHM (50.5 to 505 mPa). UV Absorption Analyzer according to ISO 1431-3 and ASTM D4575 with  $\pm 3\%$  accuracy

**Test chamber:** Cylindrical Stainless Steel test chamber with internal illumination and inspection window. Ø 550 mm; H 550 mm. Volume 155 Litres

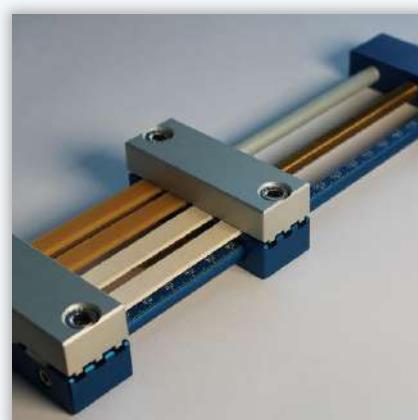
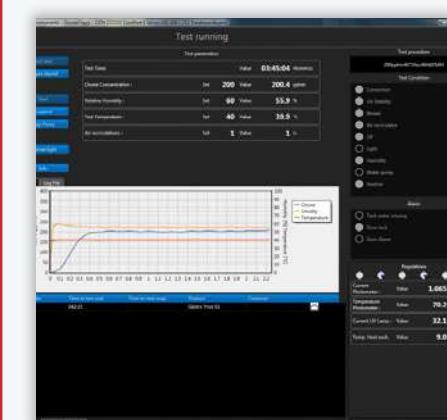
**Air flow:** Adjustable from 1 to 3 changes/min (air change speed between 10 and

30 mm/sec); Internal fan according to ISO 1431.

**Static Sample Holders:** • Static strain and planetary displacement according to ISO 1431-1 standard (32 to 64 samples); • Tests on rubber hoses according to ISO 7326

**Sample holder for dynamic test:** Frequency: 3 to 30 cicles/min (0.05 to 0.5 Hz). Holder for 10 samples

**Personal Computer (optional):** Minimum Setup: Windows 10 or 11, Intel Core i5, 5GB RAM



# FLAMMABILITY CHECK

## STAINLESS STEEL CABINET FOR PERFORMING FLAMMABILITY TESTS OF PLASTIC MATERIALS, FOAMS AND RUBBER

STANDARDS: ASTM D378; ASTM D635; ASTM D3801; ASTM D4804; ASTM D4986; ASTM D5048; IEC 60695-II-10; ISO 340; ISO 1210; ISO 8030; ISO 9772; ISO 9773; UL 94; VDE 0471-II-II;

NOTE: COMPLIANCE WITH SOME STANDARDS MAY REQUIRE OPTIONAL ACCESSORIES OR SETUPS.



**gibitre**<sup>®</sup>  
INSTRUMENTS

Stainless steel cabinet for flame resistance test according to UL 94 standard equipped with:

- Bunsen burner according to ASTM D 5025 standard
- Burner support with angle adjustment (0°, 20°, 45°)
- Flow meter for gas flow adjustment
- Pneumatically actuated slide for horizontal movement of the burner
- Pneumatically operated slide for vertical adjust-

ment of the distance between the flame and the specimen during the test

- Digital thermometer with copper dart for measuring flame temperature integrated in the cabin
- Digital timer with 0.1 second resolution for measuring test time
- Inspection window with tempered glass and interior LED light
- Exhaust fan to remove combustion fumes

### Sample holders available for tests of:

- Flame resistance with horizontal specimen of solid products (HB)
- Flame resistance with horizontal specimen of cellular polymeric materials (HBF)
- Flame resistance with vertical specimen of non-rigid solid products (MVB)
- Flame resistance with vertical specimen of solid products (VB)

**Types of test that can be performed:** HBF (Horizontal Burning Foamed Material), HB (Horizontal Burning), MVB (Material Vertical Burning), VB (Vertical Burning)

**Test Cabinet:** Stainless steel with a volume of 0.5 m<sup>3</sup> with inspection window and light for internal illumination.

**Burner:** Conforming to ASTM D5025 and CEI IEC 60695-11-4 standards. With support for flame angle set (0°, 20°, 45°).

**Temperature Control:** Internal Digital thermometer in conformity with ASTM D 5207 standard

**Aspiration of Fumes:** Exhaust fan to remove fumes at the end of the test

**Gas flow Regulation (Methane):** Integrated Flow meter

**Timer:** Digital Timer with 0.1 sec. resolution. The timer permits to set the flame exposition time. At the end of the count down for flame exposition, the timer permits to count flame extinction time.

**Slide for the displacement of the Burner during the test:** The slide, controlled by a pneumatic cylinder, allows the burner to be moved from outside the chamber via the control knob.

**Slide for the regulation of the vertical position of the sample:** The slide, which is controlled by a pneumatic cylinder, allows the distance between the specimen and the flame to be controlled during the execution of the test using the adjustment knob.

