AUTOMATIC OZONE CHAMBER	TECHNICAL DATASHEET
	The Ozone Chamber is designed to test automatically the resistance of rubbers and elastomers to air mixed with ozone at a pre set environment condition. Ozone required for the test is generated by a silent discharge generator Quantity of generated ozone is measured continuously by means of a high precision analyser. In order to allow a total control of ozone concentration and temperature, the cabinet is designed and manufactured as a closed circuit. Once the specimens are positioned in the test chamber and the sealing front door is closed, the chamber is hermetically sealed. Ozone generated is mixed with the air contained in a chamber, forced into the test chamber, conveyed over the heating elements and spread uniformly all over the inner volume at the same time. In order to prevent any pollution of mixture, the electric motor of the fan is fitted out of the test chamber. After circulating in the test chamber air- mixture is exhausted, at a constant and adjustable rate, into a filtering unit where the residual ozone particles are dissolved by activated charcoal. Therefore the cycle restarts and the purified air is mixed with ozone and forced into the test chamber again. The hermetic cycling system resolves all the problems related to the disposal of air mixed with ozone, preventing any polluting condition for the operators and the environment in general.

Technical Features:

- Test chamber made of stainless steel, equipped with a hermetic gasket and a tempered glass allowing visual observation of specimens.
- Inner dimension of test chamber: 500x450x450 mm (110 litres approx.).
- Digital thermoregulator insuring a constant 20°to 100°C temperature range.
- Heat exchangers for a connection to a refrigerating source (e.g. cryostat, water, or else) for operating at a temperature lower than ambient.
- Equipped with a fan for spreading air- mixture uniformly in the test chamber.
- Door safety locking system.
- Temperature controlled by a thermoregulator that guarantees a uniformity of ± 2 ° C in the range +10° +60 ° C.
- Ozone generator consisting of a silent discharge generator.
- Ozone concentration is detected by U.V. electronically controlled and fully automatic, it measures with extreme precision ozone content in the range 10-500 pphm determining the absorption due to the present ozone detected at a wavelength of 254 nm. LED source U.V.
- The results are presented as a pphm on a digital display and are free of interference due to the presence of other gases or moisture.
- The analyzer is particularly suitable for long-term checks.
- Replacement of air from 1/3 changes / minute
- Continuous cycle filtration system with activated carbon
- Complete viewing port (without condensation).
- Humidity Range: 20%rH to 85%rH
- Humidity Uniformity: ±3%rH
- Rotational Planetary Support for the Test Device Static
- Rotational Planetary Support for the Test Device Dinamic
- Rotational speed 1/10 up to 1 rotation / min
- PLC Controller Touch screen: program 100 groups 120 sections
- Various safety functions and protection from over-current and over-temperature
- RS 232 communication port

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Accessories:

Rotary device for **Static strain testing** "Carrier" with 12 tensioners according to ISO 1431-1 standards
Code 10047025

Other solutions for performing dynamic tests according also to ASTM D 3395 are available.

Reference Standards	
ASTM	D 1149 / D 3395
ISO	1431-1 / 7326

Generals:

Dimensions: mm 900x900x 1600/1700 mm h
Internal Dimensions : 450 x 450x 500 mm h
Power: 230V, 50Hz
LT 100

Dimensions: mm 1000x1000x 1700/1800 mm h
Internal Dimensions 450 x 700 x 550 mm h
Power: 230V, 50Hz
LT 170

Code 10047021

Device for Dynamic test according to ISO 1431-1 ASTM D 3395 IEC 60811-403 (9 clampings for 18 single specimen)

Code 10047024 Static device ISO 7326

Defines five methods for determining the ozone resistance of the outer covers of hoses: - method 1, for bore sizes up to and including 25 mm, carried out on the hose itself; - method 2, for bore sizes greater than 25 mm, carried out on a test piece from the hose wall; - method 3, for bore sizes greater than 25 mm, carried out on a test piece from the cover; - method 4, for all bore sizes, carried out on the hose itself; - method 5, for all bore sizes, carried out on hoses that are expandable, for example textile-reinforced hoses.

Rotary device "Carrier" STATIC STRAIN TESTING according to ISO 7326 ,(with 16 tensioners for single specimen)

Code	Description
10047005	AUTOMATIC OZONE CHAMBER 100 lt Humidity
10047006	AUTOMATIC OZONE CHAMBER 100 lt
10047008	AUTOMATIC OZONE CHAMBER 170 lt/Humidity
10047025	Rotary Static Device "Carrier" for 12 samples
10047021	Device for Dynamic test up to 18 samples
10047024	Static device ISO 7326 for 16 samples
10047022	Stretcher for a single specimen Static

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