

Elastocon Precision ageing of rubber and plastic materials. Ageing Ovens EB 04-II, EB 10-II and EB 12-II

Excellent temperature stability and distribution by using an inner chamber with a controlled air flow.

As a 1 °C error in temperature corresponds to around 10 % error in test time, the temperature accuracy is very important for heat ageing tests.



**Interior
EB 04-II
EB 10-II**



EB 10-II - EB 12-II

controller

**EB 04-II
Flowmeter**

Specifications according to ISO 188 Method A, IEC 811 and other equivalent standards.

These ageing ovens are ideal for ageing finished products and large test pieces which are unsuitable for cell ovens. Both shelves and rods are supplied with these ovens for accommodating most types of samples. The settings are done on the PLC color touch screen.

- ⊕ Lower energy consumption by using improved insulation materials
- ⊕ Lower surface temperature
- ⊕ Color touch screen control with micro PLC for easy entering of oven settings
- ⊕ Micro PLC control
- ⊕ Resettable countdown timer
- ⊕ Test identification - "Test name"
- ⊕ Alarm history
- ⊕ Improved door hinges and two point locking
- ⊕ Improved door sealing
- ⊕ Easier shelf installation and removal
- ⊕ New 4-layer glass window (OPTIONAL)

Model EB 04-II • Adjustable air exchange, 3 to 20 times/hr. Compressed air supply required.

Model EB 10-II & 12-II • Fixed air exchange, 7 or 14 times/hr. By factory set throttle.

Excellent temperature stability and distribution is achieved by using an inner chamber with a controlled air flow. As such performing well inside the apparatus requirements in ISO 188, IEC 811 ASTM D 3012 , ISO 4577 and other equivalent standards. The EB 04 & EB 10 are available in 60 and 120 l inner volume.

The EB 12-II, available in 50 l volume only, **meets the requirements as specified in ISO 188 method B and ISO 4577.** This oven offers a high air speed with laminar flow from bottom to top.

The EB 12 II has the same specifications and external dimensions as the EB 10 II-60.

All models are available in standard version (40 to 200°C) and in HT-version (40 to 300°C)

Technical specifications

	EB 10 II-60 / 120 EB 04 II-60 / 120	EB 12 II
Temperature range:	40 to +200°C (HT=300°C)	40 to +200°C (HT=300°C)
Temp. control	40-100°C: ±0,5°C 101-200°C: ±1,0°C 201-300°C: ±1,5°C	±0,5°C ±1,0°C ±1,5°C
Temp. variation in time:	±0,25°C	±0,25°C
Temp. variation in space:	±0,5%	±0,5%
Temperature sensors:	PT 100, 1/3 DIN	PT 100, 1/3 DIN
Useful chamber volume	60 / (120) liter	50 liter
Air speed:	<0,001 m/s	1 ±0,5 m/s - laminar
Dimensions, chamber w x h x d:	60 liter - 450 x 450 x 300 mm 120 liter - 550 x 550 x 400 mm	450 x 450 x 250 mm
Dimensions, external, w x h x d:	60 liter - 810 x 720 x 620 mm 120 liter - 910 x 820 x 720 mm	810 x 720 x 620 mm
Dimensions glass window (option !)	4 layers - 200 x 300 mm	4 layers - 200 x 300 mm
Sample rod positions	60 liter - 15 120 liter - 24	15
No of rods included	60 liter - 10 pcs 120 liter - 12 pcs	15 pcs
Inner chamber illumination (option !)	10W 24 V halogen	10W 24 V halogen
Air changes EB 10 and EB 12*	7 or 14 changes/hour * preset by Manufacturer	7 or 14 changes/hour * preset by Manufacturer
Air changes EB 04 by compressed air	Adjustable 3 to 20 changes/hour	
Weight:	EB 10 II-60 - 86 kg EB 10 II-120 - 114 kg	86 kg
Voltage:	220-240/1/50	220-240/1/50
Power:	2100 W	2200 W
Standards:	ISO 188 method A IEC 60811-1-2 IEC 60216-4-1	ISO 188 method B ISO 4577

All Elastocon ageing ovens have two temperature instruments, one for controlling the temperature and one for indicating the temperature close to the samples.

General specifications

- ⊕ Special design with controlled air exchange rate and high air speed
- ⊕ Housing in steel, painted with epoxy powder paint in blue green colour.
- ⊕ The inner chamber is made of Stainless Steel
- ⊕ Temperature controller with 0.1°C set point(PLC)
- ⊕ Solid state relay for safe control.
- ⊕ Fixed over-temperature fuse.
- ⊕ Temperature indicator with sensor in the inner chamber.
- ⊕ Fixed over temperature fuse.
- ⊕ Fixed set air exchange rate of 7 or 14 changes per hour, or adjustable with flow meter (EB 04 II)
- ⊕ Cooling channels in the casing for low surface temperature.
- ⊕ Controlled cooling fan for the electronics cabinet.
- ⊕ Indication of power failure, Run-time meter and Countdown timer (on PLC)

Options

- ⊕ **EC 11**, monitoring software with alarm function
- ⊕ **EB 04-IIDS**, door sensor, switching fan off when door opens.
- ⊕ Network cable
- ⊕ **EB-P**, ramp function for temperature settings in the PLC
- ⊕ **EB 04-IIW**, four layer glass window and chamber illumination
- ⊕ **HT**, temperature range up to 300°C

ELASTOCON reserves the right to modify these specifications in part or in whole.