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ISO 9001 certified

EPO-N
PYROLYSE-OVEN
WITH NITROGEN SYSTEM

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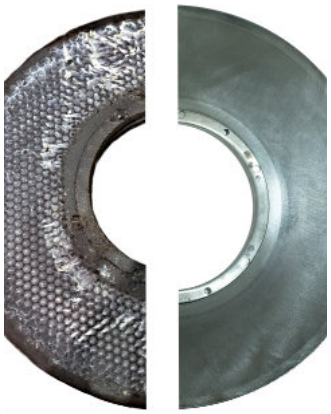
EPO-N PYROLYSE-OVEN WITH NITROGEN SYSTEM

The **ECON** pyrolysis oven EPO -N was specially developed for cleaning laser filters. The material and environmentally friendly cleaning process is carried out in a nitrogen atmosphere and has numerous advantages for the user.



GENTLE REMOVAL OF THERMOPLASTICS AND MIXED PLASTICS *

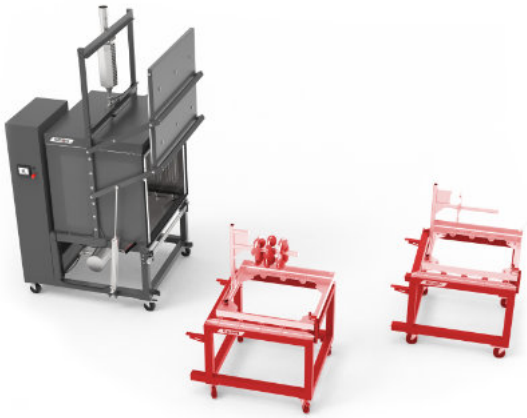
The freely definable temperature ranges at which the cleaning process takes place minimise the thermal load on the laser filters and other parts to be cleaned. This leads to a

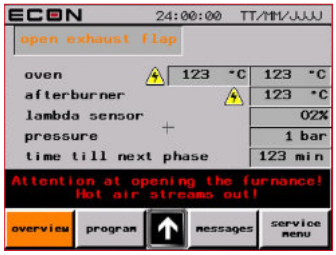
LONG LIFETIME OF THE FILTER PARTS AND TOOLS

The parts to be cleaned are not mechanically stressed (no brushing, no scraping, etc.) and are only gently cleaned using the thermal pyrolysis process. At the end of the cleaning process, the remaining layer of dust is blown off the screens with compressed air.

CONVENIENT LOADING

The oven has a freely movable loading basket that can be loaded regardless of where the oven is located. Several loading baskets can also be used at the same time. Once a loading basket is fully loaded, it is taken to the EPO-N for cleaning.



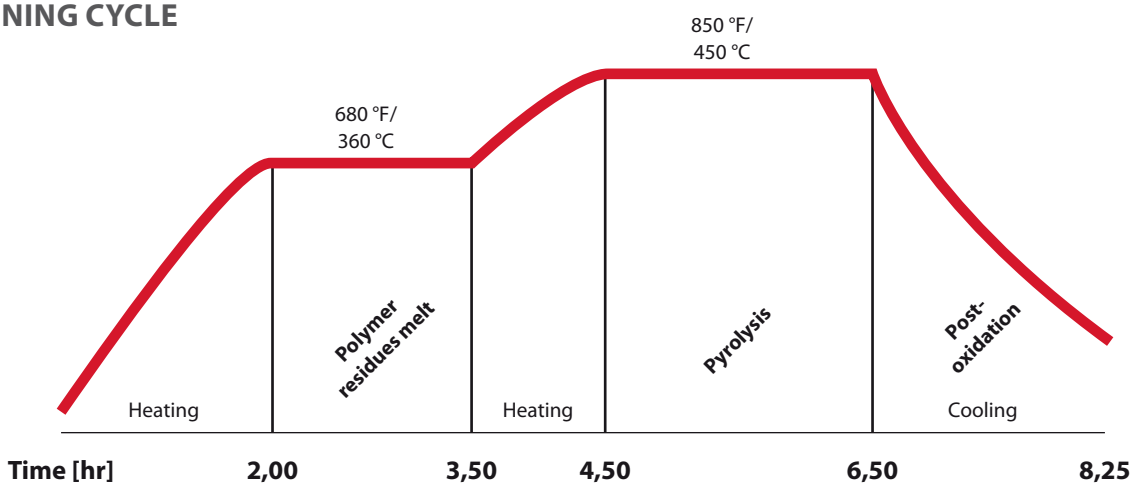


SIMPLE OPERATION AND HIGH RELIABILITY

The EPO-N is controlled via a PLC controller with touchscreen. The operating menu is organised in a very clear and user-friendly way. The self-explanatory interface is easy and intuitive to use.

*except PVC and fluoropolymers

CLEANING CYCLE



Heating phase
The nitrogen generator on the EPO is supplied with compressed air and fills the EPO with nitrogen. If the oxygen content in the cleaning chamber falls below 14 %, the heating phase begins (up to approx. 360 °C).

Drip-off phase
At approx. 360 °C, most polymers have exceeded their melting point and drip off the mould. These polymer residues are collected in the collection container.

Pyrolysis phase
The temperature is now increased further to approx. 450 °C. At this temperature, the polymer chains break up and ash. The resulting gases are neutralised by the afterburner.

AFTERBURNERS

The gases produced during the cleaning process are burnt in the afterburner. The gases produced during pyrolysis are heated again and burnt with additional oxygen. This leads to lower emissions. Pollutants such as carbon monoxide (CO) or Micro dust are reduced, which improves the exhaust gas quality and makes the stove more environmentally friendly.

NO WASTEWATER

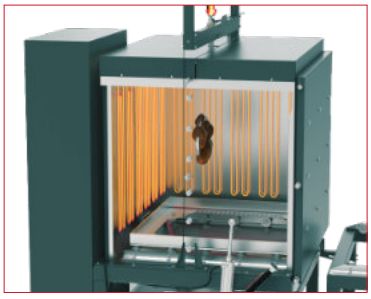
The use of an afterburner eliminates the need for waste water and its disposal.

SAFETY

The oxygen content in the interior is monitored by a Lambda probe. The heating phase of the oven only begins when the oxygen content inside the oven is lower than 14 %.

VERY LOW MAINTENANCE REQUIREMENT

Due to the nitrogen-based cleaning process used, the EPO-N does not require any maintenance intensive components (e.g. vacuum pump). (e.g. vacuum pump) This means that the EPO-N requires very little maintenance and has a very high system availability.



LOW ENERGY CONSUMPTION

Nitrogen has a much better heating behaviour than vacuum. The heat is distributed better and more evenly in the loading chamber (than with vacuum). Due to the internal insulation, less mass needs to be heated. All these points result in very low energy consumption of the EPO-N.

ECON-Typ	L x W x H (cm)	Charging Room W x H x D (cm)	Loading Height (cm)	max. Load (kg)	max. Pyrolysis Temperature (°C)
EPO-N 1000	296 x 162 x 346	100 x 100 x 100	100	100	450

FOR ALL THERMOPLASTICS AND SPECIAL APPLICATIONS

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- **flexible service solutions** - for your **individual requirements**

PROFESSIONAL **REMOTE MAINTENANCE**

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