

ECON

PELLETIZING
IS IN OUR
DNA



✓ **WORLDWIDE TECHNOLOGICAL LEADER**

✓ **TRUSTED DEVELOPMENT PARTNER**

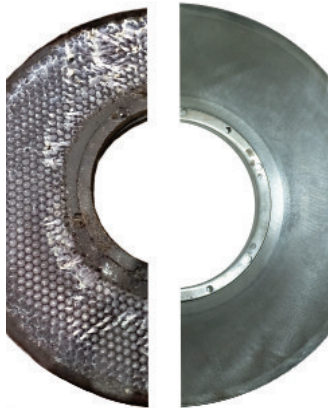
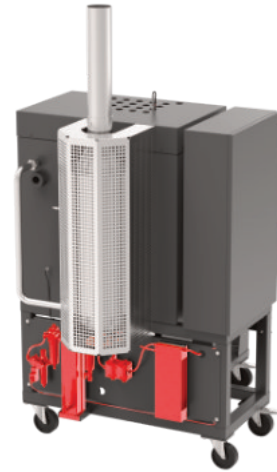


ISO 9001 certified

EPO-N **PYROLYSIS FURNACE** WITH NITROGEN SYSTEM

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EPO-N PYROLYSIS FURNACE WITH NITROGEN SYSTEM



Gentle cleaning for extended component life

The EPO-N is designed to remove thermoplastics and other organic residues from metallic components - such as laser filters, tools, and extruder parts - under a controlled nitrogen atmosphere generated directly from compressed air.

Freely adjustable temperature profiles enable precise, residue-free thermal cleaning without mechanical stress or oxidation. This gentle process helps preserve part quality while extending component service life.

A final compressed-air blow-off removes any remaining dust. Suitable for almost all thermoplastics (excluding PVC and fluoropolymers).



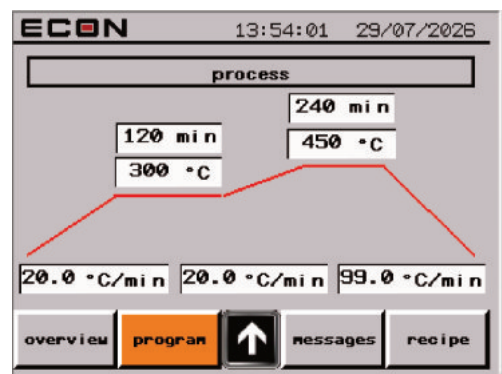
Flexible, crane-free loading with an ergonomic design

Mobile loading baskets and dedicated transport carts allow components to be loaded regardless of the furnace location and integrated seamlessly into existing production workflows.

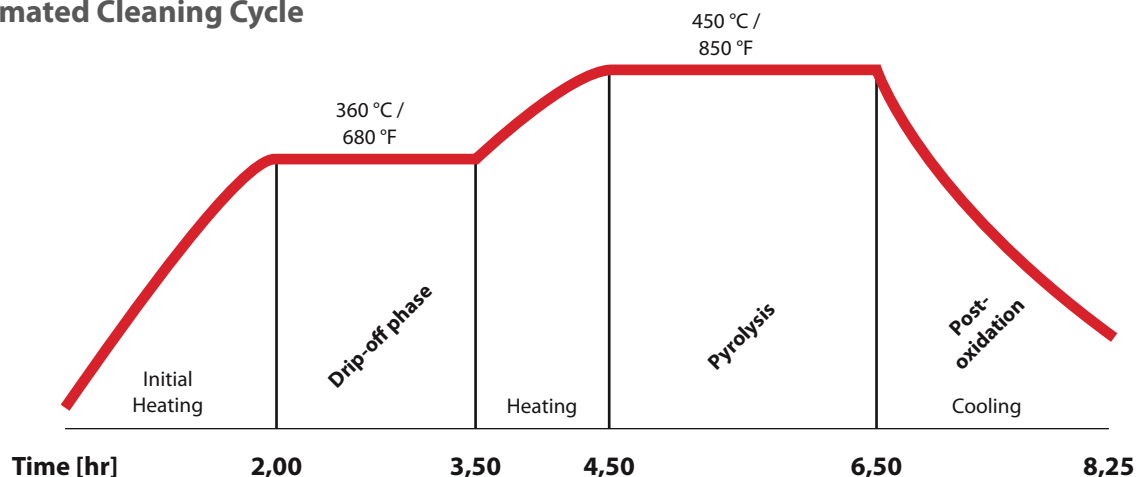
Once loaded, a **single operator** can transport the basket to the EPO-N and insert it from the front, eliminating the need for cranes while ensuring safe, efficient, and ergonomic handling.

Easy operation and consistent results

The EPO-N features a modern PLC control system with a touchscreen interface. Its clearly structured and self-explanatory menu enables **intuitive operation**, ensuring consistent cleaning results, even across multiple shifts and changing operators.



Automated Cleaning Cycle



Initial heating

Electrical heating starts automatically once the required nitrogen atmosphere has been established.

Drip-off phase

Once 360 °C is reached, most polymers melt and drip into the collection container, leaving only minimal residues behind.

Pyrolysis

At 450 °C, polymer chains decompose into pyrolysis gases and a small amount of ash. The gases are then treated in the afterburner.

Automatic safety, minimal effort

Continuous oxygen monitoring via a lambda sensor ensures a stable inert gas atmosphere. The heating phase starts only when oxygen levels drop below 14%, enabling safe pyrolysis.

High energy efficiency

Efficient and uniform heat transfer, combined with internal insulation, ensures excellent thermal performance.

Integrated afterburner

Organic compounds in polymer vapors are thermally oxidized in the afterburner for safe and reliable exhaust gas treatment.

Maximum uptime with minimal maintenance

Thanks to its nitrogen-based cleaning process, the EPO-N requires no maintenance-intensive components, reducing downtime to a minimum.

Flexible to your requirements

The EPO-N is available in two sizes to accommodate different component dimensions and cleaning requirements. Additional configurations are available on request.



ECON Type	Charging Chamber (W x H x D)	Max. Load	Max. Pyrolysis Temperature
EPO-N 600	600 x 600 x 400 mm 23,62 x 23,62 x 15,75 in	500 kg 1100 lbs	450 °C 840 °F
EPO-N 1000	1000 x 1000 x 1000 mm 39,37 x 39,37 x 39,37 in	1000 kg 2200 lbs	450 °C 840 °F

YOUR BENEFITS WITH ECON



Integrated nitrogen generation
from compressed air



Gentle cleaning for
extended component life



Electric heating with
no gas connection required



Flexible, crane-free loading
with an ergonomic design



Safe front-side operation
by a single operator



Maximum uptime with
minimal maintenance



Energy-efficient
machine concept



Compact footprint to
save workshop space

ECON WORLDWIDE

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