

ENJAY

# Particle- Repellant Heat Recovery Coil



Enables energy recovery in the Fast Food industry.  
Saving money and lowering CO2 emissions

# Lepido by Enjay

Our particle-repellant heat recovery coil ensures efficient energy recovery in particle-laden exhaust air in kitchen ventilation. Designed to handle dirty air environments, particles pass through without adhering, providing reliable and consistent heat recovery across diverse applications.

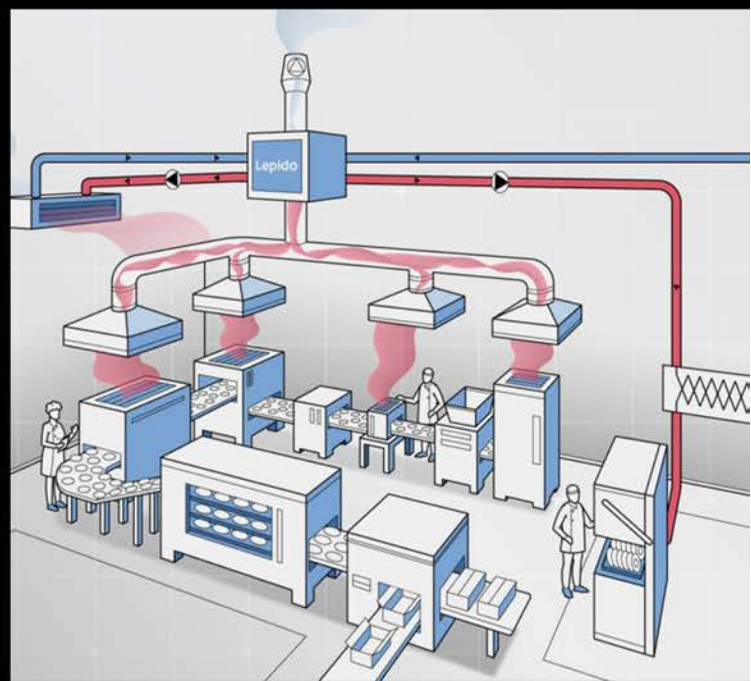
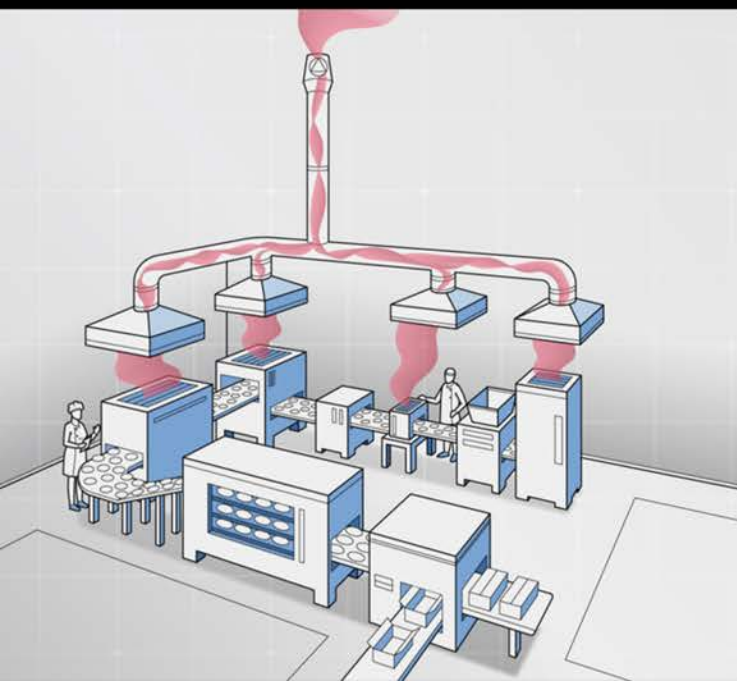
This innovation opens up the possibility of heat recovery in areas where it was previously considered impossible.





## Polluted exhaust air

In all buildings with ongoing commercial processes such as cooking or frying, the air inevitably becomes polluted and is ventilated out through process ventilation systems. Our technology enables the recovery of heat from this dirty air. The recovered heat can be used to warm the premises or to heat air/water used in the process. This way, energy consumption is reduced, resulting in economic savings and decreased fossil carbon dioxide emissions.





## How it operates

The patented configuration of the tubes creates an airflow where particles travel with the air through the recovery unit without getting stuck. This enables heat recovery in all environments where the ventilation air has been contaminated with particles.



# Examples of usage

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Particle-laden exhaust air is present in many different operational areas. Here are some examples where our technology can be used to recover energy:

- Commercial Kitchens/Hotels: Recapturing heat from exhaust hoods to reduce energy consumption and operational costs.
- Industrial Laundries: Harnessing waste heat from dryers to preheat incoming water, enhancing efficiency.
- Food/Snacks Production: Recovering heat from ovens and fryers to lower energy usage and improve sustainability.
- Heavy Industrial Welding: Utilizing heat from welding processes to maintain optimal temperatures, reducing overall energy demand.
- Grain Dryers: Reusing hot air from drying processes to improve energy efficiency and cut costs.
- Lacquer Boxes: Capturing heat from painting and coating operations to save energy and reduce emissions.

# CLIENT CASES

## INDUSTRIAL LAUNDRY



|                            |                          |
|----------------------------|--------------------------|
| Type of unit:              | Industrial laundry       |
| Location:                  | Netherlands              |
| Operating hours:           | 16h/day                  |
| Air flow exhaust air:      | 2 x 0,6m <sup>3</sup> /s |
| Temp. exhaust air:         | 75°C                     |
| Lepido effect:             | 2 x 27 kW                |
| Energy recovery:           | 240.000 kWh/year         |
| Monetary savings:          | €13.000/year             |
| Decrease CO <sub>2</sub> : | 60 tonnes /year          |

## FAST FOOD



|                            |                      |
|----------------------------|----------------------|
| Type of unit:              | Fast food restaurant |
| Location:                  | UK                   |
| Operating hours:           | 16h/day              |
| Air flow exhaust air:      | 1,2m <sup>3</sup> /s |
| Temp. exhaust air:         | 34°C                 |
| Lepido effect:             | 33 kW                |
| Energy recovery            | 54.600 kWh/year      |
| Monetary savings:          | €2.990/year          |
| Decrease CO <sub>2</sub> : | 13,65 tonnes/year    |

## FOOD PRODUCTION



|                            |                      |
|----------------------------|----------------------|
| Type of unit:              | Food production      |
| Location:                  | Nordics              |
| Operating hours:           | 20H/day              |
| Air flow exhaust air:      | 9,7m <sup>3</sup> /s |
| Temp. exhaust air:         | 40°C                 |
| Lepido effect:             | 288 kW               |
| Energy recovery            | 614.90000 kWh/year   |
| Monetary savings:          | €33.300/year         |
| Decrease CO <sub>2</sub> : | 50 tonnes/year       |

# Contact Information



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