



## Datasheet Lynx Kitchen 250

Self-cleaning grease separator for commercial kitchen exhaust

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**Type:** Self-cleaning grease separator for kitchen hoods

**Application:** Retrofit installation on any standard kitchen hood for restaurants and industrial food production, regardless of hood brand and independent of factory pre-fitting on new hoods during production

**CE-marked:** Yes. All components are rated for 20 years of continuous operation (24/7)

### Key benefits

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- Clean ventilation ducts
- Reduced fire risk with no fat in duct
- No need for ozone and UV systems
- Fits any hood, irrespective of brand
- No downtime for maintenance
- Chemical-free operation
- Energy-efficient operation with heat recovery potential
- Camera monitoring and interlock to the building management system

### Specifications

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- Capacity: 850 m<sup>3</sup>/h per unit
- Mounting: vertical or horizontal
- Droplet size: All sizes down to 0.1 micron
- Separation efficiency: 100 %
- Total pressure drop: 180 Pa (*0 Pa in fire mode, see below*)
- Duct diameter: ø250 mm. Height: 700 mm, diameter: 350 mm
- Weight: 7 kg (composite), 17 kg (stainless steel)
- Supply and power consumption: 220–240 V, 50 Hz, single phase, 90 W
- Control box: Schneider Altivar
- Installation time: under one hour per unit

### Models and sizing

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Lynx Kitchen is supplied in one size, rated at 850 m<sup>3</sup>/h per unit. Higher capacities are met by clustering units in parallel rather than stocking multiple models. This keeps inventory, training and spare parts simple.

Sizing rule: one Lynx unit per 850 m<sup>3</sup>/h of kitchen exhaust airflow. A typical restaurant uses two to four units, a hotel or banquet kitchen four to eight, and an industrial kitchen more. Additional size variants are on the development roadmap for 2027.

### Contact

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## Fire safety and regulatory compliance

In Sweden, the fire safety of commercial kitchen exhaust ducts (imkanaler) is governed by the Boverket building regulations. The industry standard Imkanal 2012:2 is the route normally used to demonstrate compliance. The following sets out how Lynx Kitchen relates to the relevant requirements.

**Duct fire protection (BBR 5:5332).** The regulation requires that exhaust ducts and their associated parts be designed to protect against the spread of fire and fire gases within and between fire compartments. The general advice sets out that the fire protection of a commercial kitchen exhaust duct should be adapted to the risk of combustible deposits forming in the duct. Where large quantities of deposits may form, the duct should meet ISO 6944-2 for fire both inside and outside the duct. As a baseline, exhaust ducts from commercial kitchens are run in fire class EI 60 in Br1 buildings, and at least EI 30 in Br2 and Br3 buildings.

**The filtration route (BBR 5:5332, general advice).** Swedish regulation is explicit that a commercial kitchen may, as an alternative to the ISO 6944-2 duct, be designed with either a filtration system that reduces the risk of deposits forming, or an automatic extinguishing system that limits the spread of fire in deposits. Lynx Kitchen is precisely such a filtration system. By separating grease before it reaches the duct, Lynx directly satisfies this recognised compliance route, allowing the established EI 60 duct to be retained rather than requiring the substantially more demanding ISO 6944-2 duct.

**Fail-open behaviour in a fire.** Lynx Kitchen incorporates an automatic safety function. The opening threshold can be configured to any chosen temperature between 100 °C and 400 °C. When temperature rises above this threshold, the unit opens automatically and its pressure drop falls from 180 Pa to 0 Pa. Airflow through the unit increases and the smoke evacuation capacity of the system rises accordingly. The unit therefore supports smoke evacuation in a fire rather than restricting it.

**Regulatory transition.** Boverket's building regulations are changing. The older BBR applies during a transition period until 1 July 2026, after which the new function-based regulations apply to all new permits. The new regulations are more technology-neutral and place the emphasis on functional fire-safety performance rather than prescriptive solutions. Because Lynx removes the source of combustible deposits rather than relying on a prescribed duct class, the solution maps directly onto a function-based requirement: a duct that stays clean cannot sustain a duct fire. Lynx is therefore aligned with both the current BBR and the function-based regime that replaces it.

The essential point concerns what these requirements target. The fire risk in a commercial kitchen comes from flammable grease that deposits in the duct network. The fire-class requirements limit the consequences when this grease ignites. They do not remove the cause. Lynx Kitchen addresses the problem at the source: grease is separated before it reaches the duct, so the fuel a duct fire depends on does not exist. The duct stays clean continuously, and the burden of duct cleaning is substantially reduced.

## No ozone, no ozone-certified components

Many commercial kitchen exhaust solutions rely on ozone or UV treatment to break down grease and odour downstream. Ozone is a reactive gas, and any system that generates it must use ozone-resistant, ozone-certified components throughout the duct run, along with the monitoring and safety measures that ozone handling requires.

Lynx Kitchen removes grease mechanically at the source and does not generate ozone. Because no ozone is present in the system, there is no requirement for ozone-certified ducting, seals or downstream components, and none of the associated monitoring obligations apply. This simplifies the installation, removes a category of certification and maintenance cost, and eliminates the workplace exposure considerations that ozone-based systems carry. Where odour treatment is still required for a specific site, it can be added as a complementary stage, but it is no longer a structural requirement of the exhaust system itself.

## Best practice in design

For the designer, the goal is an exhaust system that keeps the duct clean throughout its service life, not one that meets the minimum requirement on paper. Lynx Kitchen is simple to integrate into the calculations.

Sizing follows a single rule: one Lynx unit per 850 m<sup>3</sup>/h of extracted air. Higher requirements are met by placing units in parallel. A typical restaurant uses two to four units, a hotel or banquet kitchen four to eight, an industrial kitchen more. The pressure drop is 180 Pa per unit in normal operation and integrates into fan sizing in the usual way. In fire mode this drops to 0 Pa as the unit opens.

Separation is placed as close to the source as possible, immediately after the hood, so that grease is removed before it reaches the network. The downstream duct therefore stays clean continuously. This delivers three concrete project advantages: it satisfies the BBR 5:5332 filtration route so the established EI 60 duct can be retained, the need for duct cleaning is reduced, and downstream heat recovery becomes practical because the exchanger does not foul with grease.

For the property owner and the inspecting body, this is a clear argument. The solution is documented by five years of camera-monitored operation, it is the only grease-separation technology approved by Avinor for kitchen extraction at Oslo Airport Gardermoen, and its operation is logged continuously to the building management system. The designer can justify the choice on both technical and fire-safety grounds, and present a solution the property owner can accept with confidence.

## Installation examples



Horizontal Lynx Kitchen installation.



Two Lynx Kitchen units mounted above a kitchen hood.  
Dimensions: 350 mm diameter, 500–700 mm height, 850 m<sup>3</sup>/h per unit

## Installation procedure

Four steps, under one hour per unit. No duct modification, no welding and no specialist skills. All it takes is one circular opening and a power outlet.

### Step 01 Cut the opening

Drill or cut a circular 360 mm opening in the top plate of the existing hood. No welding, no duct modification and no changes to the existing ventilation duct.



*A 360 mm opening cut into the hood top plate.*

### Step 02 Fit the collar and grease drain

A collar is fitted into the opening and the grease-collection nozzle is connected by hose to the existing grease trap. Separated grease drains back continuously during operation.



*Opening with collar fitted and grease-collection nozzle connected at the lower edge.*

### Step 03 Lower the unit, mount the converter box

The Lynx unit drops into the opening and is secured with the supplied clamp ring. The converter box is fixed alongside, connected to the unit with the supplied cable, and plugged into a 220–240 V outlet.



*Opening with collar fitted and grease-collection nozzle connected at the lower edge*

### Step 04 Commission

Lynx is operational immediately on startup, with continuous separation and logging from day one. No calibration and no run-in period. Where higher airflow is required, units are simply clustered in parallel.



*Two Lynx units with converter boxes mounted, clamp ring ready for fitting.*

## Operation and maintenance

- Switch on when the kitchen hood is in operation, switch off after use
- In case of abnormal sound or vibration, switch off and contact service
- Cleaning only by an authorised service partner
- Recommended service interval: 2 times per year for heavy use, 1 times per year for light use