

Large Flow Firefighting Ventilators:

- Why Should You Use It?
- In Which Situations?
- Which One to Choose?

In today's world, the construction of larger buildings is on the rise. To meet the challenges posed by these structures, LEADER has developed firefighting ventilators known as Large Flow Ventilators (LFV) or Mobile Ventilation Units (MVUs). These ventilators deliver high airflows, making them effective in combating large fires in various settings such as warehouses, tunnels, airports, industrial complexes, and high-rise buildings.



When should you consider using a high flow/volume firefighting ventilator, and what are the benefits?

Firefighting Ventilation / Smoke Exhaust in Road or Railway Tunnels:

Large flow firefighting ventilators can be utilized when the fixed ventilation system is faulty or requires reinforcement. They serve the following purposes:

- Evacuating smoke from the structure
- Cooling the volume
- Facilitating the intervention of emergency services



Firefighting Ventilation / Smoke Exhaust in Airplanes and Other Aircraft:



High flow firefighting ventilators prove invaluable during the evacuation of passengers. By rapidly pressurizing the aircraft fuselage, these fans enable:

- Quick smoke evacuation
- Rapid supply of fresh air
- Improved visibility in confined spaces



Firefighting Ventilation / Smoke Exhaust at Airports:

Given that airports comprise vast interconnected spaces, it is crucial to promptly evacuate smoke and prevent its spread. This helps minimize the impact of disasters on travelers and ensures maximum safety.

Firefighting Ventilation / Smoke Exhaust in Factories after Firefighting Intervention:

Fixed smoke extraction systems are not always present or adequately sized to handle smoke capture. Consequently, production may come to a halt, resulting in substantial financial losses (several K€ per minute of stoppage).

A Mobile Ventilation Unit (MVU) offers a mobile, modular, and costeffective solution for occasional use. It significantly reduces smoke extraction times in industrial sites and can pressurize volumes to prevent the spread of smoke and hot gases to other warehouses.



<u>Firefighting Ventilation / Smoke Exhaust in Shopping Centers:</u>

Shopping centers typically comprise large stores and interconnected malls, presenting significant volumes in which smoke can rapidly spread. To ensure the safety of both people and property, the extraction of smoke on a large scale becomes essential.



Firefighting Ventilation / Smoke Exhaust in High Buildings:

Due to the diverse configurations of high buildings, positive pressure ventilation is often necessary to generate sufficient pressure from the stairwell to the top floor. The larger the building, the more openings and sources of pressure loss exist. Therefore, a Large Flow fan (LFV) offers more efficient pressurization of the entire volume.



<u>Firefighting Ventilation / Smoke Exhaust in Covered / Underground Parking:</u>

High pressure ventilators can operate in either overpressure or under pressure, depending on the premises' architecture. They can handle smoke extraction in areas without fixed systems and can complement or replace existing fixed systems as required. When equipped with exhaust ducts, LFVs can remove smoke from larger volumes compared to conventional extractors (with a flow rate 6 to 10 times greater).



Why Choose a LEADER Large Flow Firefighting Ventilator

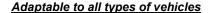
(Mobile Ventilation Unit)?

High flow fan = assured ventilation / smoke exhaust in large volumes

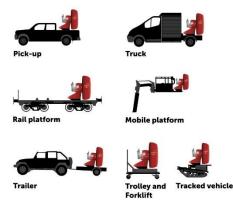
LEADER's high-flow ventilators are independent of fixed firefighting protection systems, offering mobility and efficient ventilation of very large volumes. With an airflow range from 115,700 m³/h to 1,120,000 m³/h, these ventilators can quickly ventilate expansive areas. They excel in firefighting scenarios involving underground parking lots or warehouses.

Easy to operate for one person

LEADER's trailer-mounted high-flow fans are designed for easy operation and positioning by a single individual. Their weight, power, and manoeuvrability ratios make them highly efficient high-flow fans with unparalleled performance.



LEADER's Large Flow/Volume fans are available in trailer or "skid" versions, allowing them to be mounted on various mobile intervention vehicles such as pickups, trucks, railway platforms, lifting arms, trailers, trolleys, forklifts, and even tracked vehicles.



Accessories and Options for Enhanced Efficiency

- Wireless Remote Control: It is sometimes necessary to move away from the fan to orient it correctly.
 - Thanks to the wireless remote control and its range of 50m, it is possible to remotely control all the functions of EASY 5000 High Flow fans! The advantage of "wireless" is that there is no cable on the ground and therefore no risk of falling!
 - In addition, EASY 5000 large flow fans is equipped as standard with a control panel on the fan!
 - □ Indeed, it is safer to always have a fixed control panel (in addition to the remote control) in order to keep control of the machine even in the event of a breakdown or loss of the remote control!
- <u>Misting System</u>: Our LEADER ventilators come equipped with a standard misting system, allowing for the use of water or water with additives. With a flow rate of 260 l/min at 7 bar and an effective range of up to 60m, these fans efficiently dilute and cool smoke.
- <u>High Expansion Foam Adapter</u>: Transform your blower-fan into a High Expansion Foam Generator by using the foam adapter!
 - This enables the generation of foam through a duct spanning over 30m. It is particularly useful for suppressing fires in cellars or parking lots. Our LEADER MIX foam dosing systems and BIOEX fluorine-free foam concentrates can be utilized to fill large volumes effectively.
- <u>Shroud Inclination</u>: Our ventilators are equipped with a shroud tilting system (from -10° to +20°) as a standard feature.
 - ⇒ This allows for easy adaptation to various configurations, including landings, stairs, tunnels, underground car parks, and cellars.
- **Blowing or Extraction Ducts**: To address building constraints or limited spaces, our fans can be paired with blowing or extraction ducts, <u>enabling ventilation in hard-to-reach areas.</u>
- <u>360° Rotation System</u>: Depending on the model, our ventilators are equipped with either a manual or electric 360° rotation system. An endless 360° rotation allows you to always be able to readjust the orientation without having to go back a full turn.
 - When the fan is on a trailer, simply turn the trailer to properly orient the fan.
 - When it is installed on a truck, it is sometimes difficult or impossible to orient the truck with precision, hence the interest of the rotation!
 - ⇒ The big advantage of our electric rotation is that it is done over 360° without end (you can do several turns)! This avoids wasting time in situations where often every minute counts!

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- 1200mm or 2000mm Lifting Platforms: LEADER large-volume firefighting fans can be mounted on lifting tables ranging from 1200mm to 2000mm (specifically for the EASY 2000 range).
 - ⇒ This allows ventilation over obstacles such as vehicles, walls, and industrial machines.
- **Exhaust Extensions**: Exhaust extensions are available to redirect the discharge of exhaust gases away from the fan's location or suction area.
 - ⇒ This helps minimize the introduction of gases like CO.

Choosing the Right LEADER Large-Flow Firefighting Ventilators

With various configurations to accommodate different working constraints, LEADER offers electric, petrol-driven, hydraulic, large-flow fans. These fans are portable or towable, ensuring performance and robustness as their common denominators.

<u>Portable Large-Flow Fans</u>: Ideal for medium-sized industrial buildings and underground car parks, our portable fans offer simplicity and excellent value for money. They can be equipped with optional misting systems for thermal protection and are particularly effective for extraction.





PARKFAN 80

<u>Large Flow Fans</u>: Designed for the ventilation of very large volumes in warehouses, tunnels, airports, industrial complexes, and high-rise buildings, our high flow/volume firefighting fans include:

- ⇒ <u>EASY 4000 on Skid or EASY 4000 trailer-mounted</u>: 810,000 m³/h open air flow, weight ranging from 372 kg to 692 kg depending on the model and options.

 The EASY 4000 is the ideal solution for ventilating very large volumes, including tunnels, industrial buildings, high-rise structures, and airport halls.
- ⇒ <u>EASY 5000 on Skid or trailer-mounted</u>: 1,120,000 m³/h open air flow, weight ranging from 720 kg to 1000 kg depending on the model and options. The EASY 5000 is the most powerful large flow ventilators on the market! It is particularly adapted to the extra-large volumes!



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<u>LEADER</u>, <u>firefighting equipment manufacturer</u> since 1985, offers a wide range of <u>firefighting Large Flow Fans</u>! They are entirely designed and manufactured in France (in Normandy) with the greatest care and with a high level of quality and performance.

They are all CE compliant and their flow rates are certified by official independent laboratories: LOMC (Laboratoire Ondes et Milieux Complexes) FRANCE.

ABOUT LEADER

A major company for several decades, LEADER designs, manufactures and promotes high performing equipment used in firefighting and search and rescue applications.

LEADER offers innovative products such as PPV fans for firefighting, Search equipment for tech rescue operations, flame simulators for training, etc.

For more information:

- about the LEADER Large Flow fans range, visit our website www.leader-group.company
- And stay connected with our social media:
 - o <u>LEADER Facebook page</u>,
 - o <u>LEADER Youtube chanel</u>
 - o <u>LEADER Linkedin account</u>