Jet fans are a pollution control solution that help induce air to a common exhaust point through directed airflow. Although Jet Fans are slowly being adopted in North America through upgraded codes, Jet fans have been globally accepted as a cost-effective alternative to traditional ducted parking garage ventilation for years. Soler & Palau has been investing in jet fan technology since the inception of the jet fan market globally. Soler & Palau is now bringing years of experience, design, and reliability to the US and Canadian markets.

Jet fans do not require ductwork. This important feature saves money, provides a cleaner look with fewer conflicts, lowers height requirements, and allows for easier maintenance.

There are two primary types of jet fans: axial and centrifugal. The primary difference between the two is the plume they induce. While axial jet fans induce a horizontal plume, centrifugal fans provide a plume with inclination. This inclination helps avoid beams and obstructions. Axial fans are good for inducing air movement over car parking spaces, as well as driving lanes. Finally, centrifugal fans generally have a lower profile, so they can be used in low ceiling areas.

Centrifugal jet fans, especially IFFTs, are suitable for high ceiling parking garages, as the tilted plume allows the jet fan to be installed on the ceiling while providing air movement closer to the ground.
APPLICATIONS

Historically, ventilation systems of enclosed parking garages have relied on ducted systems to extract air from the parking area. The fresh air is drawn in via access ramps, louvers, shafts or supplied by fans. Extract grilles may have been located at a high level, low level, or both. While required ventilation rates may vary from country to country, this system of extract has been considered suitable for pollution control.

Impulse ventilation, or Jet Fans, offers an effective alternative to ducted extract systems. Extract fans are still required to provide air extract to comply with local regulations for pollution, however, ducting within the parking space may be minimized or removed completely. Provision for fresh air inlet must be maintained as before, via access ramps, louvers, shafts or provided by supply fans. Jet Fans distributed within the car park area induce airflow throughout the parking area. Thus air flows from air inlets, is induced throughout the parking area toward the extract points, to minimize or eliminate areas of stagnant air.

The concept comes from the experience of longitudinal ventilation in tunnels. The removal of air ducts within the parking area may assist in building design by maximizing useful parking space, and reducing the potential for conflict with other services, especially during installation. However, care must be taken with the selection and location of these Jet Fans to ensure effective and efficient air movement, to provide proper pollution control.
WHY JET FANS?

Cleaner appearance

LESS conflicts in CONSTRUCTION

Ducting NOT REQUIRED

LESS clearance REQUIRED

EASIER maintenance

COST EFFECTIVE

GAS DETECTORS

S&P is offering two detectors compatible with the Jet Fan series.

- Dual Sensor for CO (Carbon Monoxide) & NO2 (Nitrogen Dioxide)
- Sensor for CO (Carbon Monoxide) only

The detectors detect gases and can turn fans on/off or to different speeds depending on the amount of gas present. The detection levels are easily set by the customer to trigger the system as needed.

The detectors can be used to create “zones”, so that only certain groups of fans operate when needed in the garage.
**IFFT**

**MODEL FEATURES**
- Thrust air between 13 and 90N
- Air flow up to 5238 CFM
- cULus 705 Listed
- Available in 60 Hz; 230V, 460V and 575V
- Galvanized sheet steel housing
- Industry Best 5 year housing warranty, 1 year motor

**TJFU**

**MODEL FEATURES**
- Thrust air between 8 and 89N
- Air flow up to 6474 CFM
- cULus 705 Listed
- Available in 60 Hz; 230V, 460V and 575V
- For daily ventilation
- Industry Best 5 year housing warranty, 1 year motor

**IFAB**

**MODEL FEATURES**
- Low profile design for low ceiling heights
- Thrust air at 12N
- Air flow up to 1530 CFM
- cULus 705 Listed
- Available in 60 Hz, 115V or 230V
- Industry Best 5 year housing warranty, 1 year motor