

INTEGRATED SMOKE CONTROL SOLUTIONS

FOR CAR PARKS, STAIRCASES,
FIRE-FIGHTING LOBBIES AND ESCAPE ROUTES



EN-12101-3
Powered smoke and heat
exhaust ventilators for use
in Construction Works



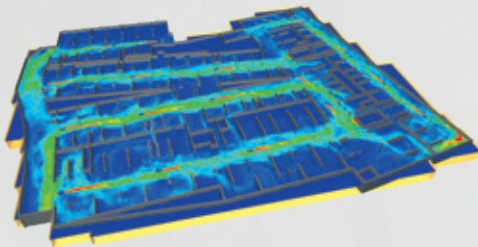
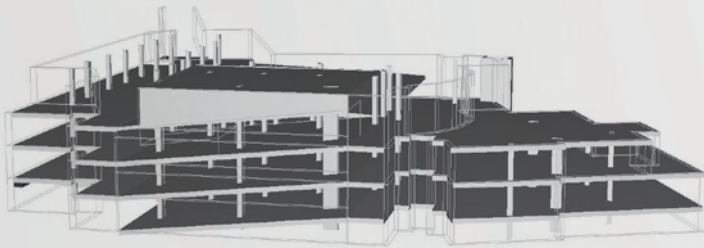
SODECA has focused its business activity on the manufacture of industrial fans, ventilation systems and smoke extract fans for fire protection since it was formed in 1983.

With the help of comprehensive research and development methods SODECA fans are installed extensively around Europe and many other parts of the world. SODECA has a commanding position as one of the best and most widely recognised fan manufacturers in Europe thanks to stringent quality control procedures to ISO 9001:2015.

The "human factor" is extremely important in achieving our objectives and we are proud to have highly professional people working at SODECA. People who can offer ventilation solutions as well as equipment for our customer's needs. Our customers can visit our 16,000m² production facility near Sant Quirze de Besora, where we manufacture ventilation equipment of the highest quality to ISO and AMCA standards.

This catalogue contains just a few of the options we can offer. Please contact us and our experienced staff will be at your disposal.

EXPERTS IN SMOKE CONTROL



SODECA has wide experience in the design and fabrication of equipment for ventilation and smoke exhaust in car parks.

Our projects department distinguishes itself from other companies by offering project design services and best-practise advice. It has specialist technicians who can deliver a comprehensive technical study, including sizing of equipment and required plant space.

They are experienced users of advanced Computational Fluid Dynamics (CFD) software, which they use to validate design parameters and simulate values such as smoke behaviour, temperature, visibility, air velocities and CO concentration.

COMPREHENSIVE SOLUTIONS

SODECA adapts to the needs of each client, offering comprehensive ventilation and smoke control solutions:

CAR PARK VENTILATION.

VENTILATION FOR STAIRCASES AND ESCAPE ROUTES.

SMOKE EXTRACT CONTROL SYSTEMS.



In addition, SODECA offers the option of testing installations using **real (hot) smoke tests**.



CAR PARK VENTILATION

In modern buildings, car parks are now another feature of the building architecture. In many cases, they are the first space visitors enter in buildings such as shopping centres, entertainment complexes, offices and passenger transport hubs.

Correct car park ventilation plays an important role in the first impressions of a visitor. For this reason, they must be designed to satisfy the highest environmental quality standards. In other words, the lowest possible concentrations of contaminant gases must be achieved, whilst at the same time, eliminating foul odours.

But these are not the only factors. A high degree of safety must be guaranteed in the event of fire and car park ventilation is essential for providing adequate conditions for evacuation of occupants and to aid fire-fighting operations.



VISIBILITY

Improved visibility in the fire zone



AIR

Supply of fresh air to reduce smoke toxicity



TEMPERATURE

Reduction of air temperature in the fire zone

JET FAN SMOKE CONTROL SYSTEM

Jet fan smoke control systems are considered the most suitable ventilation solution for large, unobstructed spaces such as car parks and tunnels.

Installing this type of fan reduces the need to install air supply and extract ducts, improving visibility in car parks and increasing available clearance height. In the event of fire, the jet fans generate an air current that pushes smoke toward extract points.



THT/IMP



CI



THT



THT/HATCH

Applications			
Ventilation for contaminant gas control. Ventilation in the event of fire.	Ventilation for contaminant gas control. Ventilation in the event of fire.	Ventilation for contaminant gas control. Ventilation in the event of fire.	Ventilation for contaminant gas control. Ventilation in the event of fire.
Installation			
Indoor. Below ceiling	Indoor. Below ceiling	Indoor, in ventilation shafts or plant room.	On the roof
Safety switch			
Included in L and O versions. C version on request.	Included	On request	Included
2-speed fan			
Yes	Yes	1 or 2-speed versions	1 or 2-speed versions
Temperature classification based on EN 12101-3			
F300 / F400 ₁₂₀	F300 / F400 ₁₂₀	F300 / F400 ₁₂₀	F300 / F400 ₁₂₀
Version without temperature classification			
HCT/IMP	CI-CO	HCT/HGT	-
Reversible fan version			
Yes	No	Yes	Yes



VENTILATION FOR STAIRCASES AND ESCAPE ROUTES

Pressurisation control systems prevent smoke from entering escape routes by pressurising those spaces. When the system is running, if doors are opened or in the event of air leakage, the system reacts by increasing the airflow rate. This guarantees that escape routes are always free of smoke in an emergency situation.

Escape routes include corridors, staircases, lifts and lobbies.



VISIBILITY

Visibility is ensured



EVACUATION

Safe evacuation of occupants



SAFETY

Easy access for firefighters



When selecting and classifying a system for a specific project, it is necessary to consider the building use, size and evacuation instructions in the event of fire. These criteria will help determine the necessary flow rate delivered by the pressurisation equipment.

The choice of system is very important as, this will also determine flow rates depending on the class.

PRESSURISATION SYSTEMS FOR ESCAPE ROUTES IN THE EVENT OF A FIRE

SODECA has the following solutions for **smoke extract** in staircases, fire-fighting lobbies and escape routes:



KIT SOBREPRESIÓN



KIT BOXPDS



HATCH PDS



PRESSKIT

Applications			
Staircases, corridors, lifts, lobbies	Staircases, corridors, lifts, lobbies	Staircases, corridors, lifts, lobbies	Lobbies
Installation			
On the roof, indoor	On the roof, indoor	On the roof	Only lobbies
Inlet hatches management			
-	Yes	Yes	-
Inlet leak detection			
-	Yes	Yes	-
Smoke detection			
-	Yes	Yes	-
Compatible with fire cabinets			
Yes	Yes	Yes	-
Self-calibration			
-	Yes	Yes	-
Connection to BMS systems			
Yes	Yes	Yes	Yes



SMOKE EXTRACT CONTROL SYSTEMS

For air supply and smoke extract systems in fires, with or without jet fans, SODECA has the **BOXPARK control panels**, which facilitate the integration of the ventilation system with CO and fire detection alarms.

The BOXPARK control panels are adapted to common ventilation system needs in fires, and can also be customised for large projects with the **possibility of adding modules to the system**.

We also supply fire-fighting and maintenance control panels.

CONTROL SYSTEM BOXPARK CONTROL MASTER



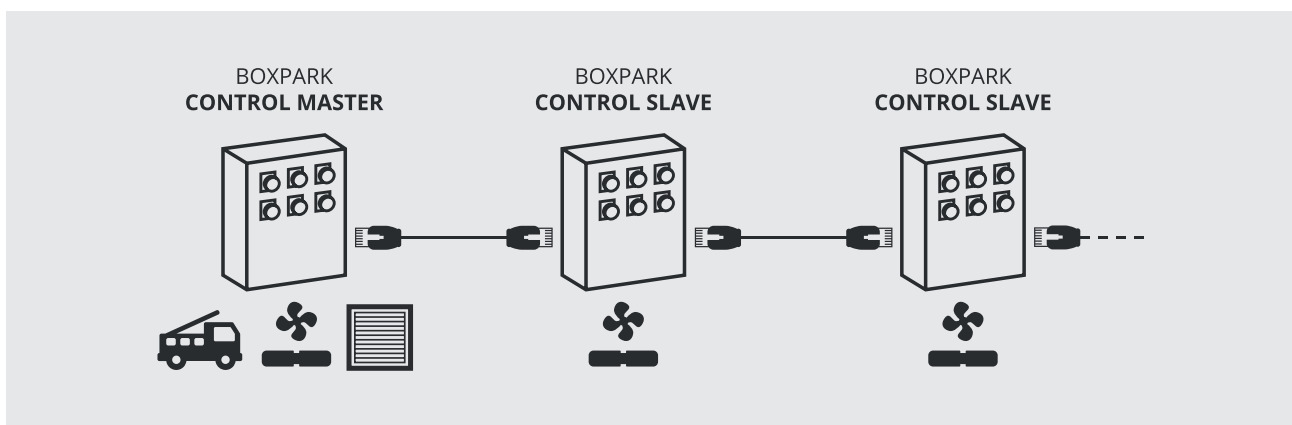
Direct communication with CO and FIRE stations



Fan control: air extract, supply and jet fans



Hatch control: air extract and supply



SMOKE EXTRACT AND CO CONTROL SYSTEMS

For automated operation of ventilation systems, depending on the specific needs of the car park.

This equipment controls the ventilation system operation, depending on the CO concentration or through the activation from a fire detection station. It also allows day-to-day programming of the car park ventilation system.



BOXPARK



CENTRAL CO

Applications	
Automated or manual ventilation control	CO concentration control
Installation	
In plant room	In plant room
Automated operating modes	
By fire detection. By CO detection.	Standard automation. Advanced automation with power savings.
Manual operation	Programmable activation levels
Speed selection (high/low). Fan selection.	Three levels with digital outputs. Analogue output for variable frequency drive.
Time programming	Programmable activation levels
Ventilation system (high/low). Operating periods.	1, 2 or 3 zones with up to 32 sensors per zone. Independent zone management.
Connection to	
MODBUS, RTU and CAN open systems	MODBUS
Ventilation control	
By contactors. Variable frequency control.	1, 2 or 3 progressive stages. Proportional control.



HEADQUARTER

Sodeca S.L.U.

Ctra. de Berga, km 0,7
E-08580 SANT QUIRZE DE BESORA
Barcelona, SPAIN
Tel. +34 93 852 91 11
Fax +34 93 852 90 42
General sales: comercial@sodeca.com
Export sales: ventilation@sodeca.com



www.sodeca.com



EUROPE

FINLAND

Sodeca Finland, Oy
Mr. Kai Yli-Sipilä
Metsälinnankatu 30, PL2
FI-32700 Huittinen
FINLAND
Tel. + 358 400 320 125
orders.finland@sodeca.com

UNITED KINGDOM

Sodeca Fans UK, Ltd.
Mr. Mark Newcombe
Tamworth Enterprise Centre
Philip Dix House, Corporation
Street, Tamworth, B79 7DN
UNITED KINGDOM
Tel. +44 (0) 1827 216 109
sales@sodeca.co.uk

PORTUGAL

Sodeca Portugal, Unip. Lda.

PORTO
Rua Veloso Salgado 1120/1138
4450-801 Leça de Palmeira
Tel. +351 229 991 100
geral@sodeca.pt

LISBOA
Pq. Emp. da Granja Pav. 8
2625-607 Vialonga
Tel. +351 219 748 491
geral@sodeca.pt

ALGARVE
Rua da Alegria S/N
8200-557 Cortesões
Tel. +351 289 092 586
geral@sodeca.pt

AMERICA

CHILE

Sodeca Ventiladores, Ltda.
Sr. Frederic Cousquer
Santa Bernardita 12.005
(Esquina con Puerta Sur)
Bodegas 24 a 26,
San Bernardo, Santiago, CHILE
Tel. +56 22 840 5582
ventas.chile@sodeca.com

COLOMBIA

Sodeca Latam, S.A.S.
Sra. Luisa Stella Prieto
Calle 7 No. 13 A-44
Manzana 4 Lote 1, Montaña
Mosquera, Cundinamarca
Bogotá, COLOMBIA
Tel. +57 1 756 4213
ventascolombia@sodeca.co

PERÚ

Sodeca Perú, S.A.C.
Sr. Jose Luis Jiménez
C/ Mariscal Jose Luis de
Orbegoso 331. Urb. El pino.
15022, San Luis. Lima, PERÚ
Tel. +51 1 326 24 24
Cel. +51 994671594
comercial@sodeca.pe

CARIBBEAN ZONE

Sodeca Cuba
Residencial Miramar
Apto. N° 108, Ave. 7ma
N° 1805 entre 18 y 20,
Miramar Playa,
La Habana, CUBA
Tel. +537 20 43721
carlos@sodeca.co.cu

RUSSIA

RUSSIA

Sodeca, L.L.C.
Mr. Stanislav Alifanov
Myasisheva str, 1, room 603
Business Center "Chaika"
140180 Zhukovskiy
Moscow region, RUSSIA
Tel. +7 495 955 90 50
alifanov@sodeca.com

