



Interview with Josep Font, Sodeca's Managing Director, and Santos Bendicho, Sodeca's Projects Director.

SODECA is a company with extensive international experience in systems for smoke control in the event of a fire



Josep Font, Sodeca's Managing Director



Santos Bendicho, Sodeca's Projects Director.

Sodeca's Projects Department carries out a technical study using CFD computational simulators before installation, and actual smoke extraction tests once the equipment has been installed. SODECA participates in most of the projects worldwide in which fans are required for smoke evacuation in the event of a fire, and this has made it an international leader in the field.

- How would you rate safety levels in Catalan industrial facilities in general?

Josep Font: Catalonia has always been a pioneer in understanding, developing and implementing fire protection systems, both at a technical and a regulatory level, and specifically with respect to smoke control systems in the event of fire.

An illustration of this is the high number of fire protection companies based in Catalonia. In addition, the requirements for industrial companies are contained in the "Fire Safety Rules for Industrial Establishments", and as a result of applying these in recent years, high quality safety systems have been implemented. There is however, still a great deal of work to do. In practice, not all buildings' architectural and functional characteristics are covered in the regulations, so these regulations should be revised in order to adapt them to current needs.

- What have you developed most recently?

Josep Font: SODECA was a pioneer in the manufacture and certification of fans for smoke extraction in the event of fire, and we are continuously working to produce new solutions designed to meet our customers' specific needs.

Currently, our efforts are focused on having the widest range of fans certified for smoke extraction for all the temperature classifications covered by European standards. In addition, we are working on developing added value smoke extraction equipment in order to bring additional benefits to the system: for example, high level of thermal insulation in its installations in temperature-controlled industrial buildings, and noise insulation for installations in theatres or auditoriums.

Additionally, it is becoming increasingly apparent that smoke control systems in case of fire cannot be conceived of as

totally independent. SODECA is therefore working on developing products to complement our fans, such as control systems and components for regulating and operating the system.

- Please tell us about some installations you have worked on and the solutions you provided for them.

Josep Font: As a consequence of designing the first car park ventilation systems with horizontal ventilation, we are pioneers in this field in Spain, and bring to this country the experience we've gained at an international level.

These systems are already available with SODECA equipment in many car parks, and are the ideal choice for the future, both for the day-to-day control of the levels of gases produced by vehicles, and for smoke management in the event of a fire.

Additionally, on an industrial level, more smoke control system based on mechanical extractors are being used, either because of the particular building's characteristics or as part of the fire protection strategy chosen.

- Do you believe that those planning for new industrial premises give serious enough consideration to ventilation systems like yours, or is there a lack of awareness in this regard?

Josep Font: In spite of the fact that the need for smoke control systems is clearly included in the regulations governing industrial premises, we still find facilities where this has been overlooked. On other occasions, industrial buildings have been designed on the basis of usage criteria which are no longer applicable, or else they have been sub-divided for commercial reasons.

SODECA designs each smoke control system specifically to coordinate with the building's other systems.

- You are Sodeca's Project Director. What does your work involve?

Santos Bendicho: Our work begins when we provide technical advice on designing ventilation systems for any type of building (housing, commercial, public, industrial, etc.), and on many occasions it only ends when the system is commissioned. We make an individual study in

collaboration with installers, builders and engineering companies, in order to devise the ventilation system which is most appropriate in each case, for example, bringing in air from the outside for health reasons and to renew the air in the interior, smoke control in the event of fire, etc.

- One of the greatest dangers in the event of a fire inside a building is the rapid spread of smoke, which in many cases may obstruct evacuation routes, making them unusable. How can you prevent this?

Santos Bendicho: There are several methods of smoke control, which depend on the characteristics of the building.

In industrial buildings, extraction systems based on the buoyancy of smoke are often used. These allow a layer of smoke to form under the roof, creating a smoke-free zone through which people can be evacuated and in which fire fighters can operate.

Techniques based on pushing a flow of air, such as pressurising evacuation routes, prevent smoke entering a building's evacuation routes.

There are other techniques which can be used for removing smoke from car parks which have lower ceilings, and from where a pre-defined amount of air must be extracted.

Finally, there is the horizontal ventilation system, which is frequently used in road tunnels. This sweeps air along the tunnel, in order to provide smoke-free areas in the interior to permit evacuation and allow fire fighters to operate.

Ventilation regulations and techniques have evolved considerably in recent years. How does SODECA deal with this?

Santos Bendicho: SODECA sits on technical ventilation and smoke control committees at both the national and international level, and collaborates on developing regulations that continually adapt the new requirements for buildings and ventilation equipment.

In a world of continuous technological evolution, we must invest in R&D, applying the latest technologies to our equipment.

Ventilation solutions worldwide

For many years, Sodeca has been prominently involved in providing ventilation solutions and smoke control applications for exceptional building projects worldwide.

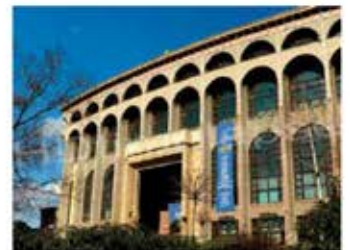
Examples of this include: Shanghai, "Shanghai Tunnel Projects"; Iraq, "Basra Sports City"; Romania, "National Theatre"; United Arab Emirates, "Abu Dhabi Tunnel"; and in Spain itself, "the Ademuz Park Shopping Centre".



Tunnel Projects Shanghai, China



Basra Sports City, Iraq



National Theatre, Romania



Tunnel Abu Dhabi, United Arab Emirates



Centro Comercial Parque Ademuz, España