



ENERGY EFFICIENCY

INTERVIEW WITH JOSEP FONT, SODECA'S MANAGING DIRECTOR

“We have gone beyond the new standards and our customers’ requirements, by creating fans which are ever more efficient.”

SODECA recently carried out an experiment - unique in Europe - in which the trajectory of smoke within an enclosed space, generated by a seven-metre high flame, was simulated



Josep Font, Commercial Director of SODECA



Test equipment for measuring the efficiency of fans

Founded in 1983, SODECA is a leader in the field of industrial ventilation, and designs, manufactures and installs industrial and commercial fans. The applications of these fans in extreme fire situations have made SODECA an international reference point. Thus, factories, shopping centres, underground car parks, residential complexes, fuel facilities and even football stadiums are benefitting from the technology created by this company. The company, which employs 150 people, is based in Sant Quirze de Besora (Barcelona). Josep Font is its Managing Director.

- Fans often seem, from an environmental perspective, to be rather inefficient machines. What is your opinion?

I believe that energy efficiency is a competitive advantage for both customers and manufacturers, and should be seen like that. Therefore, any saving in the running costs of a fan - which may be operating 24 hours a day, seven days a week, 365 days a year - is a significant financial benefit, not only for the customer but also - and above all - for society. As manufacturers, our function is to design products which are ever more efficient and to make others aware of this commitment by providing training in this area, not just in Spain, but all around the world. In addition, we explain to all our customers how choosing equipment wisely - and using it appropriately - improves performance in their facilities and reduces their energy costs.

How do you achieve this in SODECA?

In our case, there are two factors which influence the efficiency of a fan. Firstly, there is the efficiency of the fan itself, that is to say, ensuring that the design of impellers, turbines, casings

and other components is more efficient. In some cases, we have achieved savings of up to 20%. Secondly, there are the electrical motors. We have invested in motors with low electrical consumption, manufactured using technologies and materials which are very different from those traditionally used. SODECA is fully committed to improving the environment, whether through our choices of raw materials and suppliers, or through our waste management and recycling programmes. Additionally, throughout our whole process, we used energy-saving techniques to minimise the environmental impact. For example, consider the fans which work off solar or wind power, and are designed for those locations where conventional power supplies are not readily available.

-However, not all the countries in which you work make these environmental demands on you.

It's true that the 2,000 items in our catalogue include products aimed at all markets, needs and legislative frameworks, but what I can tell you is that the demand

“The demand by technologically advanced markets for efficient products has grown exponentially.”

by technologically advanced markets for efficient products has grown exponentially in a short time, and we are sure that it will continue to grow very significantly. It is true, however, that there are other, more emergent markets where long-term energy saving are not yet valued as highly as the initial investment is.

-Returning to the European Union as a market, future legislation on electrical motors and fans will be very stringent. How are you going to meet this challenge?

I can tell you that, as of now, SODECA fans already exceed the requirements which will be implemented in 2015, and this gives us a significant competitive advantage over other manufacturers. Some years ago, as a result



Real fire test at Murcia's Centre for Metal Technology facility

Wembley, Barcelona Metro and Kingdom of Bahrain

SODECA has been involved in many projects, and one of the most high profile ones was the car park ventilation system in London's Wembley Stadium, where it installed smoke extractors to work in the middle of areas with a fire risk of 400%/2h. It also worked on the design of the ventilation system for Line 9 of the Barcelona Metro, and in Bahrain, in Tatweer Petroleum. In Bahrain, it implemented a ventilation system for the room housing batteries of substations, installing fans manufactured from spark-proof materials and ATEX-certified motors which comply with the EN-14986 standard. SODECA has also worked on: the seven luxury towers in the Dubai Falak Towers complex; the Basha Sports Complex in Iraq; Deluxia Suites and Palace, a high quality residential project in Istanbul; and on the Yanbu Lift Station Tower, one of the largest petroleum refineries in Saudi Arabia

-We've talked about energy efficiency, but your company is one of the world leaders in ventilation for fire protection.

Indeed, in fires - as we regularly see for ourselves - smoke is almost as the lethal as the fire, since it makes it hard to breathe and to see the escape routes. We have developed smoke evacuation and ventilation mechanisms which can clean out the area, and this not only makes it easier for people to get out, but also for the fire-fighters to control the fire.

-What is your R&D Department's involvement?

We have a team of 8 engineers who are constantly working on new smoke evacuation projects and products; this research requires considerable investment. Additionally, to validate the designs and the products once they are operating, real fire tests must be carried out in specialised laboratories, in order to obtain certification to European standards.

Real fire tests?

Of course, and I'd like to mention a test we just carried out in collaboration with Murcia's Centre for Metal Technology. We carried out an experiment - unique in Europe in which a seven-metre high flame was burning in an enclosed space, and the gas concentrations and trajectory of smoke were simulated. There, we saw that our smoke evacuation systems passed this stringent test.

-What are your plans for the future?

A fundamental aim is to stick to our philosophy of meeting customers' needs and asking our customers what types of fans or service they require. Remember I said we have 2,000 products? Well, once we adapt them to our customers' demands, there may be as many as 3,000. We must also continue our commitment to efficient manufacturing and making customers aware of correct product usage. Lastly, we wish to continue to be a leading fan manufacturer in Spain, and to grow in our international markets.



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