

SYSTEMA

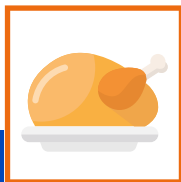
HEATING COOLING GREEN ENERGY

BAFDES

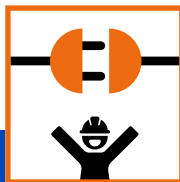
Radiant heating with convective and destratifying effect, for animals, greenhouses and the like



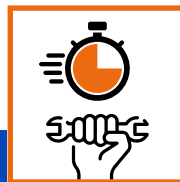
**FAST AND EASY
INSTALLATION**



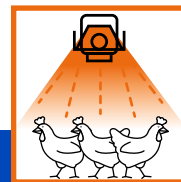
**HIGH MEAT
YIELD**



**EASY
INTEGRATION**



**LOW
MAINTENANCE**



**HIGH AND RAPID
THERMAL COMFORT**



**LOW RUNNING
COSTS**

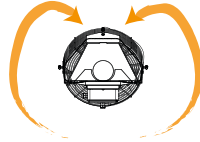


HEAT GENERATOR WITH 3 SPECIFIC FUNCTIONS

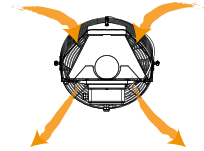
The operating principle of **BAFDES** is based on homogeneous heat distribution. This is achieved through a combined radiant-convective-destratification distribution system.



RADIANT HEATING
UNDERFLOOR HEATING



CONVECTIVE
ENVIRONMENTAL HEATING



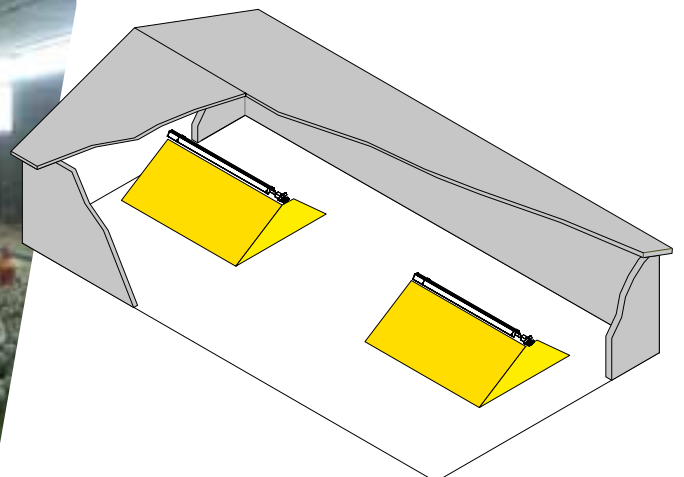
DESTRATIFICATION
ENERGY SAVING



BAFDES FOR POULTRY FARMING

BAFDES, is mainly used for heating free-range animals on land, with non-uniform temperatures of 20/25° C.

BAFDES is suitable for low-temperature heating of all animal species.

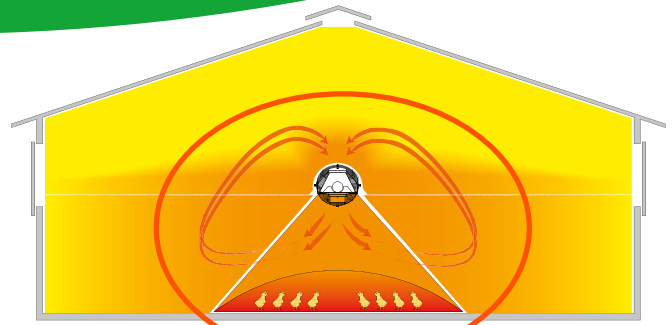


HOW DOES BAFDES WORK?

The BAFDES destratifying radiant system heats both by direct radiation and by destratifying the heat that accumulates in the upper part of the shed, directing it to the animals on the ground.

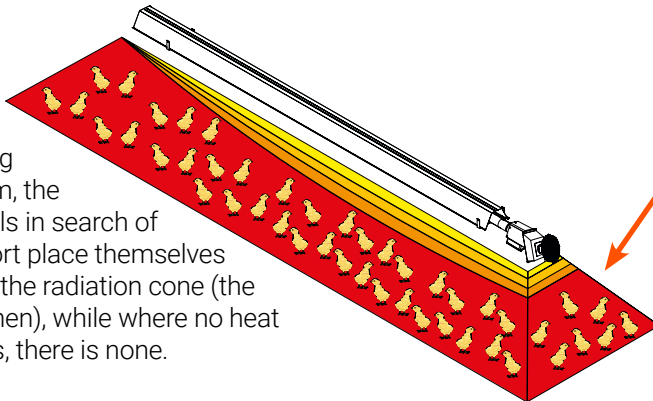
It directs the heat exclusively to the areas subject to its radiation cone and destratifying air flow, reproducing the hen effect artificially.

The air is also heated by the latent heat emitted by the bodies of the heated animals.



MOTHER HEN EFFECT

With this heating system, the animals in search of comfort place themselves under the radiation cone (the large hen), while where no heat arrives, there is none.



In the environment, it is important to create the ideal thermal comfort, the so-called 'hen effect', which can only be achieved with a radiant and destratifying system, for the well-being of the chick.

In fact, when the chick eats, it tends to prefer warmth, and searches for the ideal temperature on its own, which BAFDES knows how to create; after it is satisfied, it moves freely outside the ideal thermal zone towards less warm areas to dispose of body heat according to its metabolism.



BAFDES ADVANTAGES



HIGH EFFICIENCY AND BETTER WELFARE FOR THE ANIMAL

BAFDES offers high combustion efficiency, directly heats surfaces and animals positioned under its radiation cone, the room is also heated by convection and the latent heat emitted by the animals' bodies



FAST INSTALLATION AND COMMISSIONING

Only a gas connection, an electric connection and the fumes discharge are required, really quick installation:

1. **assemble**
2. **connect**
3. **switch ON**

and in about 15 minutes it is warm.



LOW RUNNING COSTS

BAFDES destratifies the hot air allowing better heat distribution and consequent energy savings, reducing costs by 15 to 20 % on an annual basis and increasing meat yield and weight homogeneity of the animal.

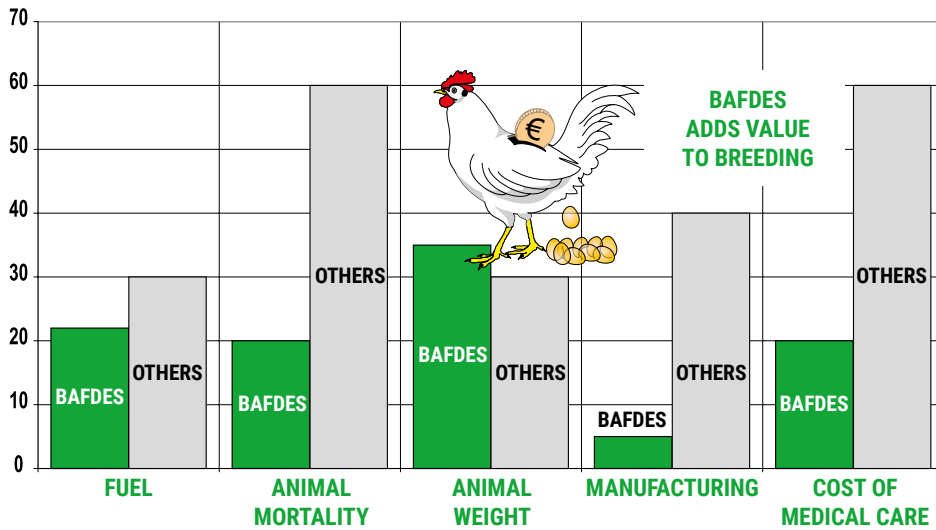


SPACE SAVING: NO NEED OF CENTRAL HEATING

Thanks to its features **BAFDES** does not imply any floor space, allowing people to operate without any obstacle. Install it with no need of any central heating and it is easy to be moved to heat other areas in case of modification or enlargements of the building.



SAVINGS COMPARED TO TRADITIONAL SYSTEMS



REDUCES THE FORMATION OF BACTERIA



ADVANTAGES

- Improved yield at the slaughterhouse and reduced waste, improved meat quality
- Reduction of relative humidity in the environment (bedding)
- Flexibility thanks to zone heating
- Heating in relation to production cycles, without plant modifications

SAVINGS

- Fuel savings
- Savings through reduced sanitation
- Savings through reduced labour
- Savings through reduction of temperature fluctuations in the farm

HEALTH AND WELFARE

- Healthier environments thanks to total abatement of pollutants (ammonia NH3)
- Decreased use of medicines
- Reduction in mortality during growth
- Reduction in respiratory diseases of farmed animals

EXAMPLES OF APPLICATION

BAFDES TURKEY FARMING

This type of animal needs a strong feeling of homogenous heat throughout the building throughout the cycle, because it is very cold and is unlikely to move to seek the heat it lacks. **BAFDES** with its effectiveness and the homogenisation of temperatures caused by destratification fans, is the answer to this problem.

BAFDES QUAIL BREEDING

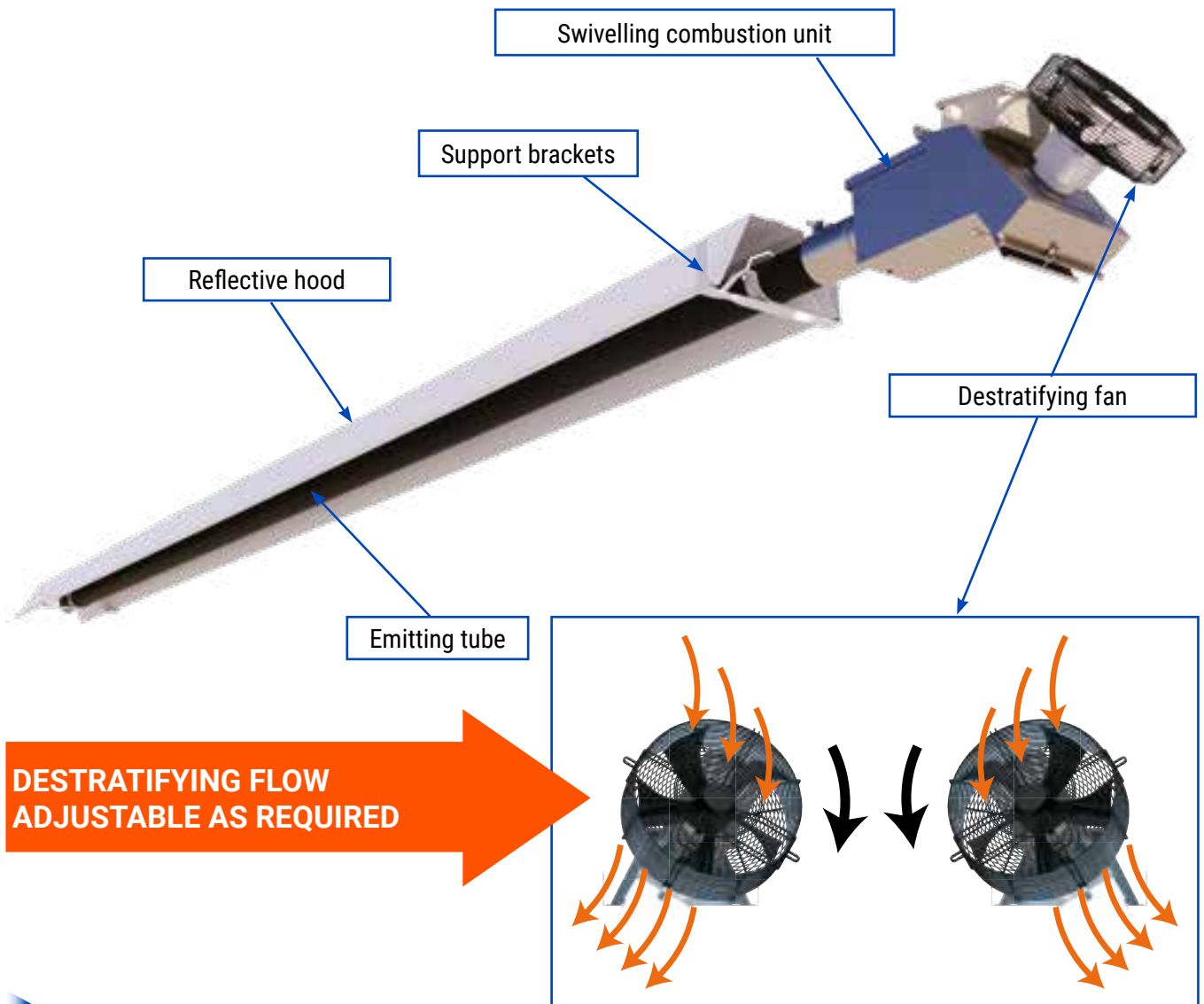
This type of animal has a tendency to be more wild. With **BAFDES**, sternum 'bags' are not produced, unlike with battery farming. Better meat quality, better yield. The system is safe even in the worst weather conditions.

BAFDES OTHER APPLICATIONS

Outside of poultry farming, **BAFDES** is used in the **pig** farming sector, for **GREENHOUSES** of all types, including **VIVAISTS**.



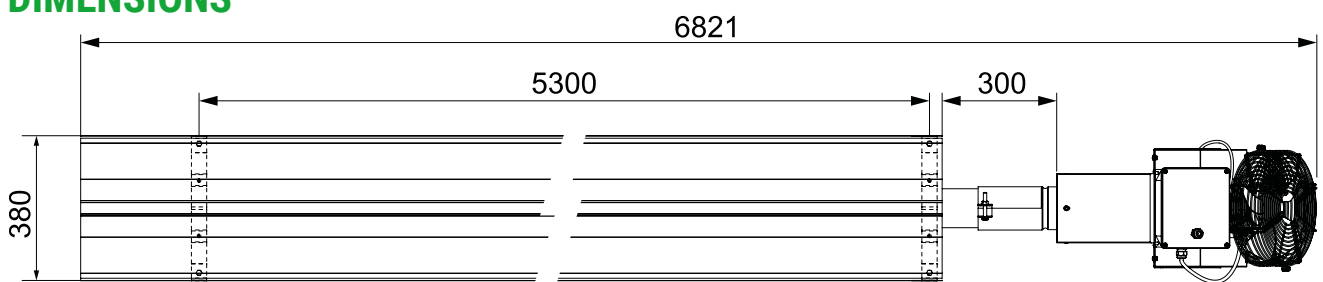
GENERAL CHARACTERISTICS BAFDES



RANGE

| Model | Use | Power | | | |
|---------------|-------------|-------|--|--|-------|
| BAFDES 6.9kW | Breeding | 9 kW | | | |
| BAFDES 6.20kW | Greenhouses | | | | 20 kW |

DIMENSIONS



Dimensions in mm

REFERENCES





Since 1986, Systema S.p.A. is one of the leader companies in Italy and Europe in designing, developing and producing devices for the heating and conditioning in industrial and commercial buildings.

There has been always in Systema's Research and Development department where high investments have been made, since the beginning, for the creation of an internal laboratory who could design and offer highly innovative products that can satisfy and anticipate all the requests coming from the market. In this field Systema works together with important Italian, European and extra-European laboratories and university departments. A cooperation which leads to the concept of innovative and visionary products and solutions and to the obtaining of several international patents.

Systema S.p.A. differs from competitors because can offer a complete range of products that goes from commercial and industrial heating with radiant and hot air solutions, to conditioning with absorption chillers, electric heat pumps and evaporative adiabatic coolers and with a specific focus on the agricultural and breeding farms products for heating (both heaters and radiant systems) and conditioning with adiabatic coolers. This range has been conceived looking for environmental-friendly products with the lowest energy consumption.

Managing such a large range of products is not easy but, also in this field, Systema S.p.A. has been always different with an internal and external organization that guarantees high quality services through an extensive commercial network made of highly qualified technical salesmen, an internal organization of customer service with experience in designing and consultancies well aware of all the required standards and rules and a massive after sales structure both internal and external that Systema keeps regularly update in order to have technicians who are always very well prepared.

The work of these structures is greatly facilitated by Systema S.p.A.'s production facilities, which are made up of the highest quality standards and production processes that are technologically advanced and constantly modernised. The united work of those responsible for production, procurement and quality allows Systema S.p.A. to make available to its commercial structure products and systems that are of high quality, reliable and made in full compliance with the most advanced standards.

Systema S.p.A. is able to supply its sales organisation with products and systems of high quality and reliability and manufactured in full compliance with the most advanced standards.

Systema S.p.A. has thus managed, over the years, to gain a strong international presence which sees it active in markets all over the world, carrying forward the flag of top quality Made in Italy and achieving leadership positions in many countries. A strategic decision was taken by Systema S.p.A. to create Systema Polska, which is able to provide a highly qualified, high quality production force and a commercial structure, in synergy with that of Systema S.p.A., which is able to present and improve the commercial penetration of Systema products in markets such as Poland and neighbouring countries.

The synergies put in place have greatly facilitated the growth of the services offered to the market, services made up of a very high level of attention to the customer, who in Systema finds not only a business partner but also a highly qualified technical consultancy service that goes hand in hand with reliable after-sales services that are always ready to quickly resolve any problems reported by the customers themselves.

*Systema: focus on the future
by interpreting the present...*



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