



# **INFRA BAF DES**

**FARMS AND GREENHOUSES  
RADIANT SYSTEM  
WITH 3 SPECIFIC FEATURES**

**RADIANT HEATING**  
HEATING OF THE FLOOR

**CONVECTION**  
HEATING OF THE ENVIRONMENT

**DESTRATIFICATION**  
ENERGY SAVING



**HEATING COOLING GREEN ENERGY**

# THE ADVANTAGES OF CHOOSING INFRA BAF DES



Radiant system "**INFRA BAF DES**" heats through radiation and convection with destratification effect, directing heat only to specific areas

## ADVANTAGES

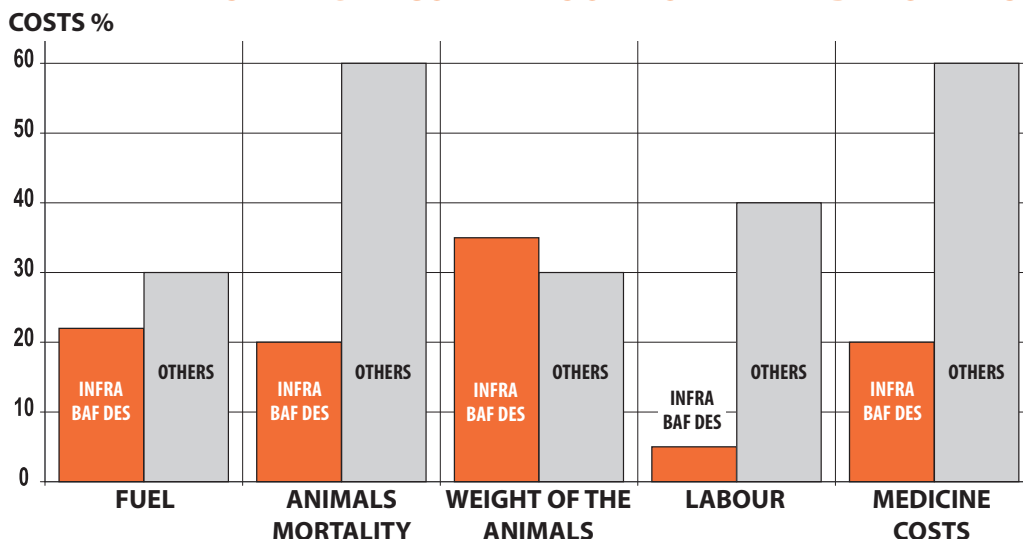
- Direct heating of the surfaces and of the animals under the radiation cone
- The location is heated through convection and thanks to the latent heat produced by the animals' body
- Warm air destratification enables to get a better heat distribution and, consequently, energy saving.
- Heating of different areas of the farm, in relation to production cycles, with computerized electronic control.
- High profitability: this product has low consumption, reduces costs by 20 or 30% and increases earnings by 10 or 20%

## SAVING

- ☑ NO POLLUTERS
- ☑ RELATIVE HUMIDITY IN THE STALL IS REDUCED
- ☑ TEMPERATURE IS CONSTANT IN EACH SECTOR OF THE STALL, THERE ARE NO HUGE TEMPERATURE DIFFERENCES
- ☑ LOWER MORTALITY AMONG ANIMALS
- ☑ LOWER USE OF MEDICINES

- ☑ REDUCTION OF THE RESPIRATORY PATHOLOGY AMONG ANIMALS
- ☑ SAVING ON WORK AND MAINTENANCE
- ☑ POSSIBILITY OF HEATING SINGLE ZONES ACCORDING TO THE PRODUCTION CYCLES, WITHOUT MODIFYING THE SYSTEM

## SAVING IN COMPARISON TO THE TRADITIONAL SYSTEMS



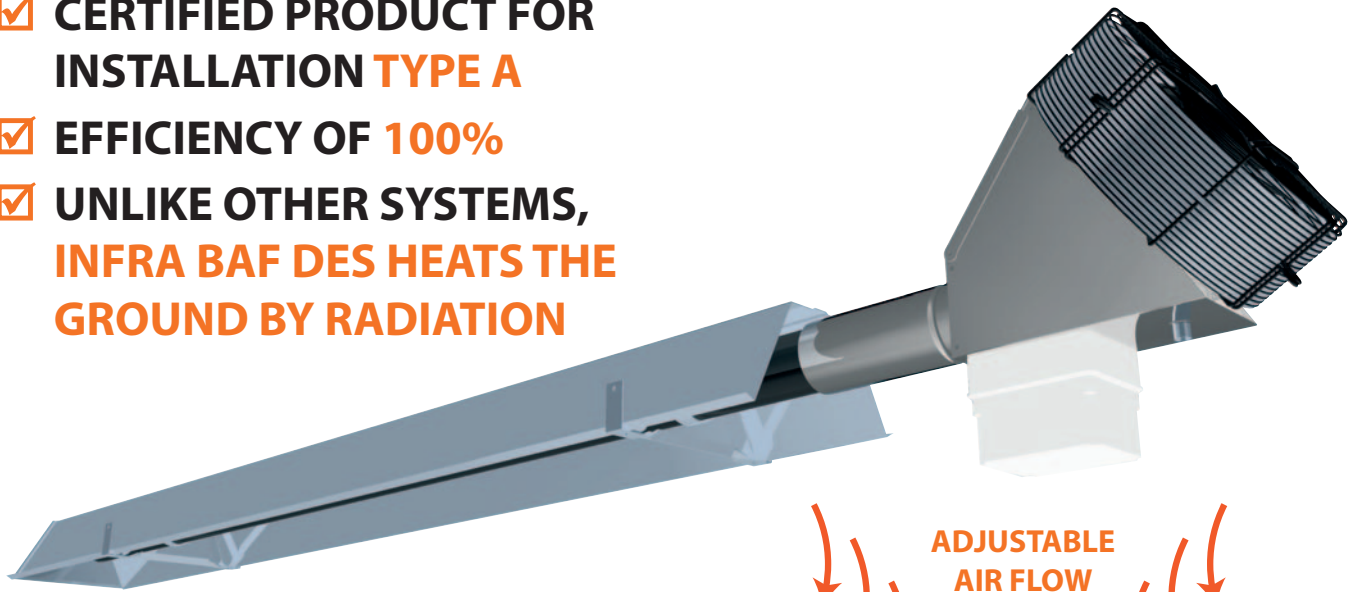
**INFRA BAF DES  
MORE VALUE TO  
YOUR BREEDING**



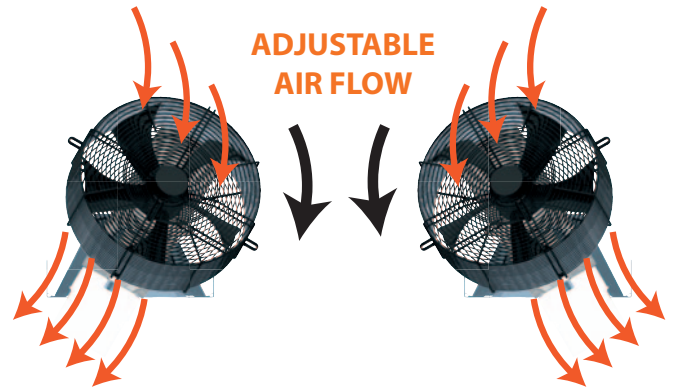
# EASY - RELIABLE - CHEAP!

INTERNATIONAL PATENT N. 0001412935

- ✓ **CERTIFIED PRODUCT FOR INSTALLATION TYPE A**
- ✓ **EFFICIENCY OF 100%**
- ✓ **UNLIKE OTHER SYSTEMS, INFRA BAF DES HEATS THE GROUND BY RADIATION**



- ✓ **DESTRATIFIER HEAD POSITIONING AS NEEDED**

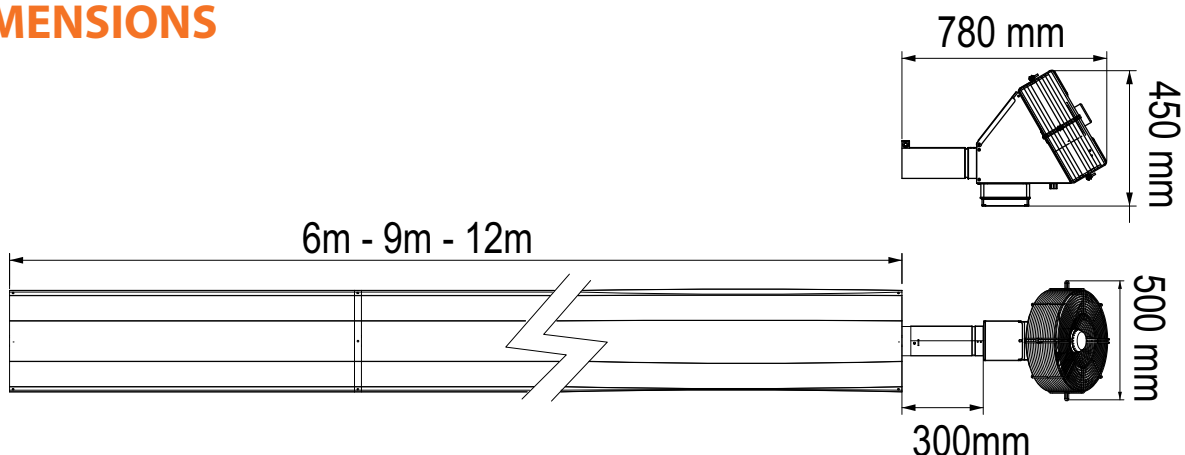


## TECHNICAL FEATURE

MODELS INFRA BAF DES			6.9KW	6.20KW 9.20KW	9.28KW	12.40KW
Rated THERMAL INPUT	kW (Hi)		9	20	28	40
Rated THERMAL OUTPUT	kcal		7740	17200	24080	34400
Rated CONSUMPTION at 15°C and 1013,25 mbar	Natural gas G20	Nm³/h	0,952	2,116	2,962	4,232
	LPG. Butane G30	Kg/h	0,708	1,574	2,204	3,149
	LPG. Propane G31	Kg/h	0,702	1,56	2,184	3,12
ELECTRIC POWER SUPPLY	V/Hz		230/50	230/50	230/50	230/50
MAX. absorbed ELECTRIC POWER	W		180	300	300	300
GAS COUPLING (F)	inches		1/2"	1/2"	1/2"	1/2"

The buildings where these products are installed required air exchanges according to regulations in force.

## DIMENSIONS





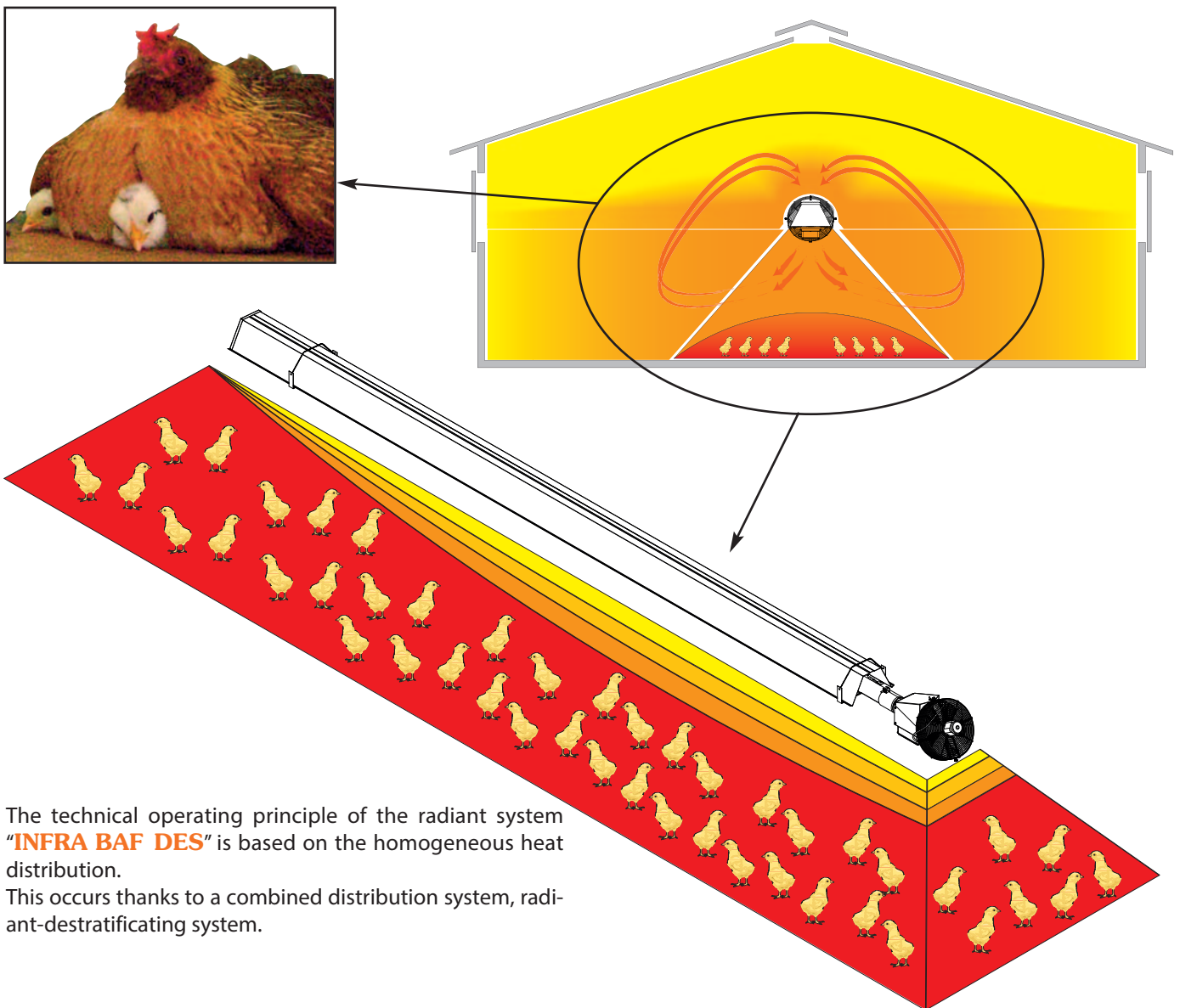
# HOW IT WORKS?

## WE RECREATED THE "BROODING HEN" EFFECT

Destratifying radiant system "**INFRA BAF DES**" heats both through direct radiation and through destratification of the heat that accumulates in the higher part of the building: the heat is directed to the ground towards animals. The device directs the heat only to those areas which are subject to its radiation cone and to the destratifying air flow: in this way, the product artificially reproduces the "**hen effect**". Besides, the air will be heated also by the latent heat produced by the animals' body.

With this heating system, animals, looking for comfort, place themselves under the radiation cone (the big hen), while they avoid to place themselves where it's cold. It's important to create the ideal thermal comfort, the so-called "**hen effect**", which can be obtained only with a radiant and destratifying system, for poultry health.

When chicks eat, they tend to prefer warm temperatures, and they look for the ideal temperature that **INFRA BAF DES** is able to create. After being satisfied, the chick freely moves also outside the ideal thermal area, towards less warm areas, in order to work off the heat of the body, according to its metabolism.



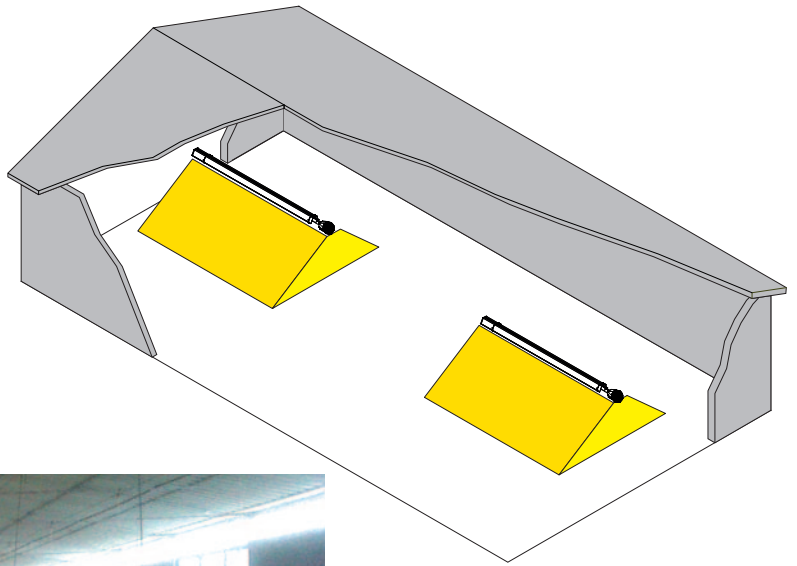
The technical operating principle of the radiant system "**INFRA BAF DES**" is based on the homogeneous heat distribution.

This occurs thanks to a combined distribution system, radiant-destratifying system.

# INFRA BAF DES FOR POULTRY APPLICATIONS

**INFRA BAF DES**, is used only for the heating of free animals on the floor with uneven temperature of 20/25°C .

**INFRA BAF DES** is apt for the heating at low temperature all animal species.



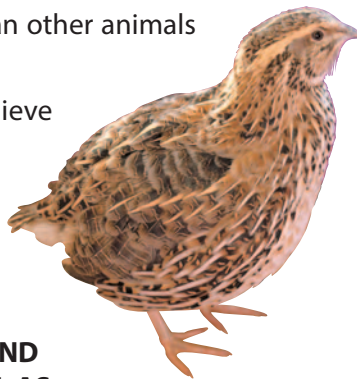
## QUAILS BREEDING

### **INFRA BAF DES, QUAILS BREEDING:**

This kind of animals tend to be wilder than other animals and can ask for different attentions.

Thanks to **INFRA BAF DES** we can achieve further advantages among which:

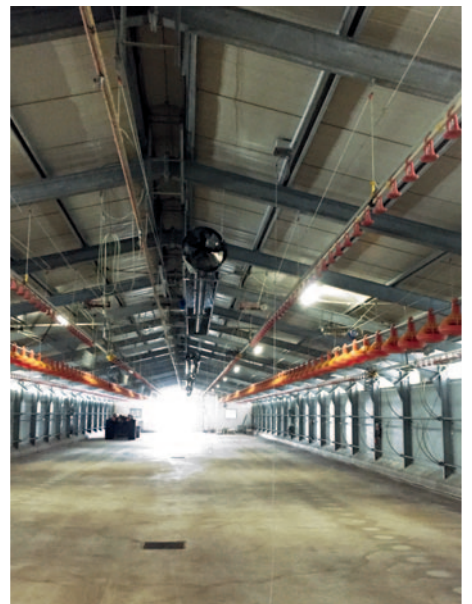
- ☑ **VERY LOW INITIAL MORTALITY AND DURING THE CYCLE**
- ☑ **HEALTHIER ANIMALS AND BETTER QUALITY LIFE FOR THEM BETTER DEVELOPMENT OF THE ANIMALS AND NO "BLOATS" ON THE BREASTBONE, AS HAPPENS TO THE ANIMALS IN CAGES**
- ☑ **BETTER MEAT QUALITY, INCREASED RENDERING WHEN SLAUGHTERED, WASTE REDUCTION**
- ☑ **GREAT REDUCTION OF LABOUR FOR THE BREEDER, SINCE THE SYSTEM IS SAFE AND RELIABLE ALSO IN THE HARDEST WINTER SEASONS, A REAL SAVING OF TIME AND MONEY.**







## GREENHOUSES







## PIG FARMS





## CERTIFICATION

**CERTIFICATO DI ESAME CE DI TIPO**  
**EC TYPE EXAMINATION CERTIFICATE**  
 No. **51C04364**

VERO L'ESITO DELLE VERIFICHE CONDOTTE IN CONFORMITÀ ALL'ALLEGATO II,  
 PUNTO 1, DELLA DIRETTIVA 2009/142/CE,  
 SI DICHIARA CHE I SEGUENTI PRODOTTI SONO DEL TIPO:

*On the basis of our examination carried out according to Annex II, section 1,  
 of the Directive 2009/142/EC we hereby certify that the following products (model/type):*

**Tubi radianti a gas**  
**Gas radiant tube heaters**

**Modelli BAFDES 6...; BAFDES 9...; BAFDES 12...; BAFDES 15...**  
**Models BAFDES 6...; BAFDES 9...; BAFDES 12...; BAFDES 15...**

(ulteriori informazioni sono riportate in allegato)  
*(further information is attached)*

**FABBRICANTE**  
**Manufacturer**

**SYSTEMA SPA**  
**VIA SAN MARTINO 17/23**  
**35010 SANTA GIUSTINA IN COLLE PD**

SOBOSZANDO LE PRESCRIZIONI DELLA SUDETTA DIRETTIVA.  
*Meet the requirements of the abovesaid Directive.*

QUESTO CERTIFICATO DI ESAME CE DI TIPO È RILASCIATO DA DAI QUALE  
 ORGANISMO NOTIFICATO PER LA DIRETTIVA 2009/142/CE.  
 IL NUMERO IDENTIFICATIVO DELLA DAI QUALE ORGANISMO NOTIFICATO È **0051**  
*This EC Type Examination Certificate is issued by DAI or Notified Body for the Directive 2009/142/EC.  
 Notified Body notified to European Commission under number 0051*

2013-05-31  
 DATA

**IMQ**  
 VIA DELL'INDUSTRIA 10 - 35010 VIGEVANO

IL PRESENTE CERTIFICATO ANNULLA E SOSTITUISCE IL PRECEDENTE DEL  
*This Certificate cancels and replaces the previous one of*

Il presente certificato è soggetto alle verifiche previste dall'Art. 18 del Regolamento relativo al rilascio di Certificati di esame di tipo e all'efficienza della Marcatura CE  
 in rapporto a gas e all'installazione per radiatori (direttiva di attuazione, in base alla Direttiva 2009/142/CE).  
 The Certificate is subject to the provisions laid down in the Rules concerning the issuing of EC Type Examination Certificates and the use of CE marking on gas appliances and the certificate for gas fittings, following the provisions of the Directive 2009/142/EC.

## INTERNATIONAL PATENT

**Ministero dello Sviluppo Economico**  
**Direzione generale per la lotta alla contraffazione**  
**Ufficio Italiano Brevetti e Marchi**

**ATTESTATO DI BREVETTO PER INVENZIONE INDUSTRIALE**

**N. 0001412935**

Il presente brevetto viene concesso per l'invenzione della domanda sotto specificata:

num. domanda	anno	C.C.I.A.A.	data pres. domanda	classifica
000406	2011	PADOVA	22/12/2011	F24F

**TITOLARE/I** PALLARO OSCAR  
CAMPOSAMPIERO (PD)

**MANDATARIO** GALLO LUCA

**INDIRIZZO** GALLO & PARTNERS S.R.L.  
VIA REZZONICO 6  
35131 PADOVA

**TITOLO** APPARECCHIO DI RISCALDAMENTO AD IRRAGGIAMENTO E  
DESTRATIFICAZIONE DELL'ARIA AMBIENTE, IL QUALE COMPRENDE  
UN CONDOTTO DI CONTENIMENTO ORIENTABILE, UN BRUCIATORE,  
UN CIRCUITO DI TUBI RADIANTI, UN VENTILATORE AVENTE LO  
SCOPO DI DESTRATIFICARE L'ARIA AMBIENTE E  
CONTEMPORANEAMENTE FORNIRE L'ARIA COMBURENTE  
NECESSARIA AL BRUCIATORE.

**INVENTORE/I** PALLARO OSCAR

Roma, 23/12/2014

**IL DIRIGENTE**  
 Dr.ssa Loredana Guglielmetti



**HEATING COOLING GREEN ENERGY**

**SYSTEMA S.p.A. Via Antonio Cecon, 3 - Loreggia C.A.P. 35010 PADOVA - ITALIA**

**Tel. +39.049.9355663 r.a. - export@systema.it**

**www.systema.it**

