

ARIANNE 1 - 2

Fans - Mixers for the uniform distribution of air in large volume environments



Technical and construction characteristics

The ARIANNE 1 and 2 air mixers were designed to equalize the temperature and humidity of large environments and reduce the energy consumption necessary for their heating. The special helicentrifugal impellers used in the ARIANNE allow total mixing of the air layers thanks to a suction action from the bottom upwards and radial distribution which immediately restores a thermal balance throughout the treated volume.

With the same operating principle, ARIANNE also solves the problems caused by summer environmental conditions which, due to the high temperatures, the high degree of relative humidity and poor ventilation, produce an intolerable climate for people and structures.

Unlike traditional blade methods, which work in vertical projection, ARIANNE acts on large areas (even greater than two hundred square meters) treating enormous volumes of air, without creating those currents that are annoying and harmful to humans.

In warehouses, churches, swimming pools, etc. the heat losses typical of large environments are reduced, optimizing the efficiency of the heating systems by reducing energy needs. Effective even in environments 18 meters high, ARIANNE homogenizes the heat throughout the environment with the absence of annoying air flows. The installation of an ARIANNE system, by reducing the thermal gradient, reduces the building's losses and its thermal needs.

The economic advantage arises from the savings on fuel consumption and on the management and maintenance costs of the heating system which will be preserved better and for longer as it is not subject to continuous operation and always at full capacity. Furthermore, the improvement of housing conditions can also translate into economic advantage.

In fact, a higher level of temperature at human level and uniformity in the various areas generate a more acceptable working condition, the reduction of the percentage level of relative humidity can improve the good conservation of equipment, machines, materials and the building structures of the building. The ARIANNE system can be installed very easily, simply hang the mixers from the ceiling and connect them to the electricity supply.



MIXING LAYERS OF AIR



ECONOMIC ADVANTAGES



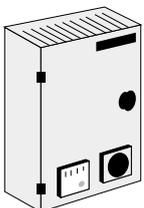
INNOVATIVE AIR MOVEMENT



EASY INSTALLATION

Model	Air flow m ³ /h	Code	€
ARIANNE 1	7500	39500001	890,00
ARIANNE 2	10000	39600001	960,00

Accessories ARIANNE 1 - 2



Electrical cabinet
4-speed control

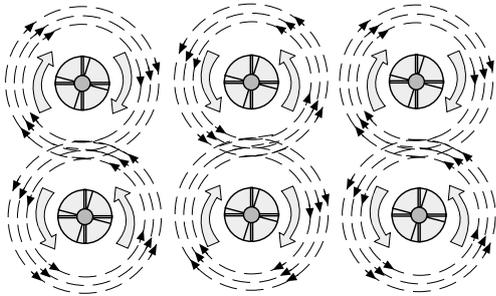
mod. up to 2 units	39600005	580,00
mod. up to 6 units	39600006	1.390,00
mod. up to 10 units	39600012	1.950,00

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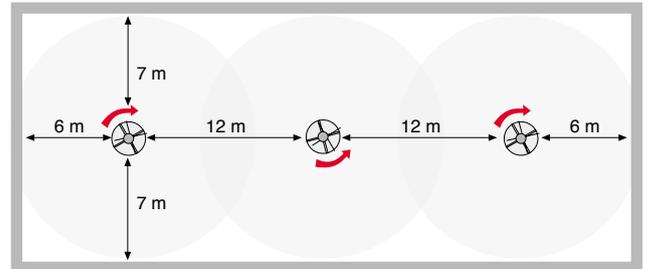
Installation examples ARIANNE 1 - 2

If more than one appliance is installed, it is necessary to alternate the directions of rotation to obtain better air mixing. For orders of more than one ARIANNE, Accorroni automatically sends machines with opposite directions of rotation.



The figure shows an example of installation of 3 ARIANNE 1 (7 m range) in a 14 x 36 meter building.

The stratifiers are installed so that the range of action covers the entire surface of the building with alternating directions of rotation.

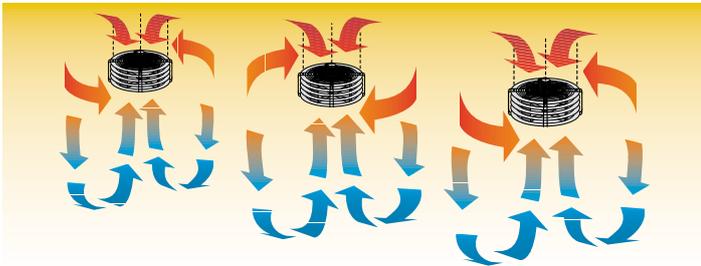


Advantages of the system ARIANNE 1 - 2

The ARIANNE uses a special helicentrifugal impeller which creates an innovative air movement: the "convergent - divergent" system.

The air is sucked in from the lower part (less hot air) and at the same time from the upper part (warmer air), mixed inside the impeller and expelled radially through the battery of circular deflectors

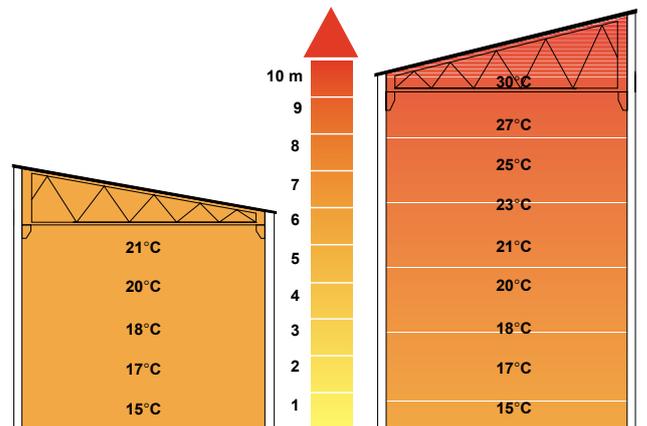
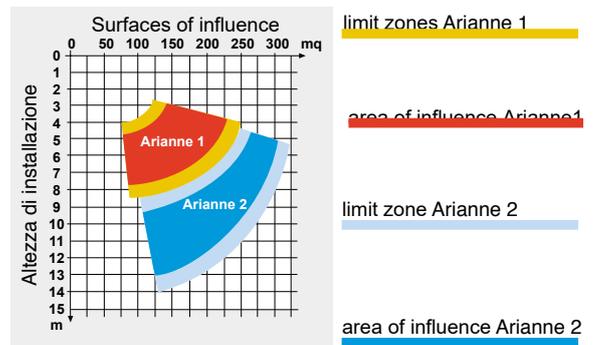
The operation generates the continuous mixing of the layers of air which exchange the temperature, humidity and pressure values between them, bringing them into balance without causing annoying currents at eye level.



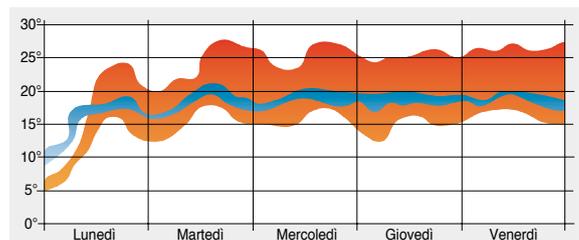
Even for the summer season the ARIANNE system allows you to obtain numerous advantages:

- Global and uniform ventilation in the environment.
- Activation of exchange and renewal with external air.
- Reduction of the concentration of fumes and odors.
- Reduction of the percentage degree of relative humidity. The installation of an ARIANNE system, by reducing the thermal gradient, reduces the building's losses and its thermal needs. The economic advantage arises from the savings on fuel consumption and on the management and maintenance costs of the heating system which will be preserved better and for longer as it is not subject to continuous operation and always at full capacity. Furthermore, the improvement of housing conditions can also translate into economic advantage.

In fact, a higher level of temperature at human level and uniformity in the various areas generate a more acceptable working condition, the reduction of the percentage level of relative humidity can improve the good conservation of equipment, machines, materials and the building structures of the building.



Thermal stratigraphy in heated environments

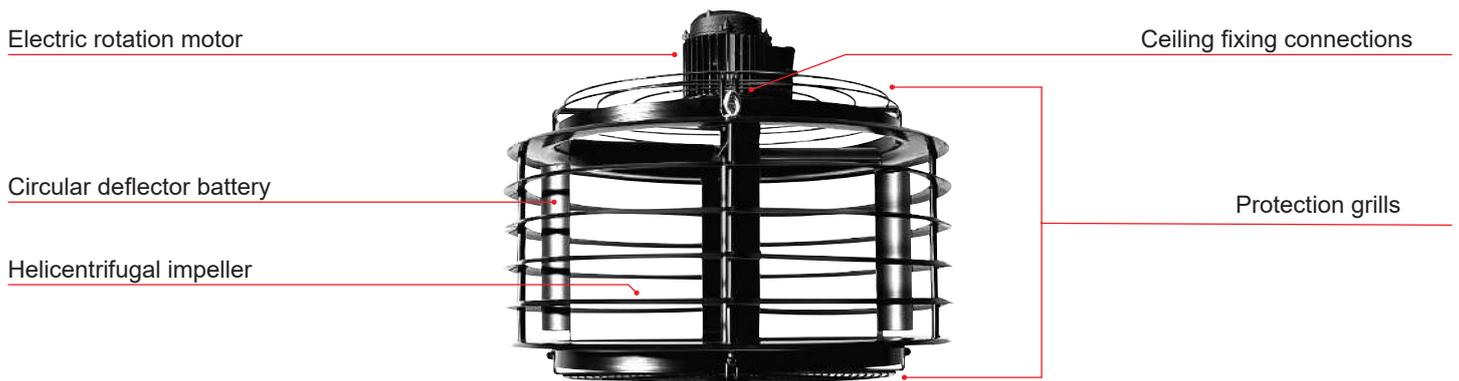


Δt° detected between 1.5 m and 9.5 m from the floor of an industrial warehouse with the heating system turned on.

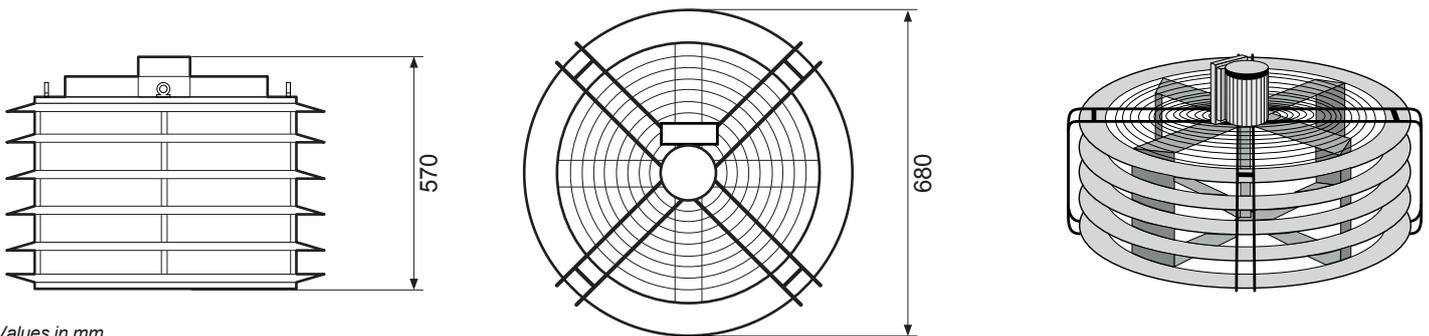


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Dimensions ARIANNE 1 - 2



Values in mm

Technical data table ARIANNE 1 - 2

DESCRIPTION	U.M.	ARIANNE 1	ARIANNE 2
Average intervention area	m ²	200	250
Power absorbed	W	200	300
Air flow	m ³ /h	7500	10000
Speed	giri/min'	700	
Motor		monofase	
Power supply		230V/1/50Hz	
Sound level	dB(A)	30	
Waterproof degree of protection	l/min	IP 44	
Fan		elicentrifugo	
Current consumption	A	1,7 / 1,0	
Paint color		Nero	
Weight	Kg	16	18