



Bonfanti

cereal dryers

BONFANTI
cereal dryers

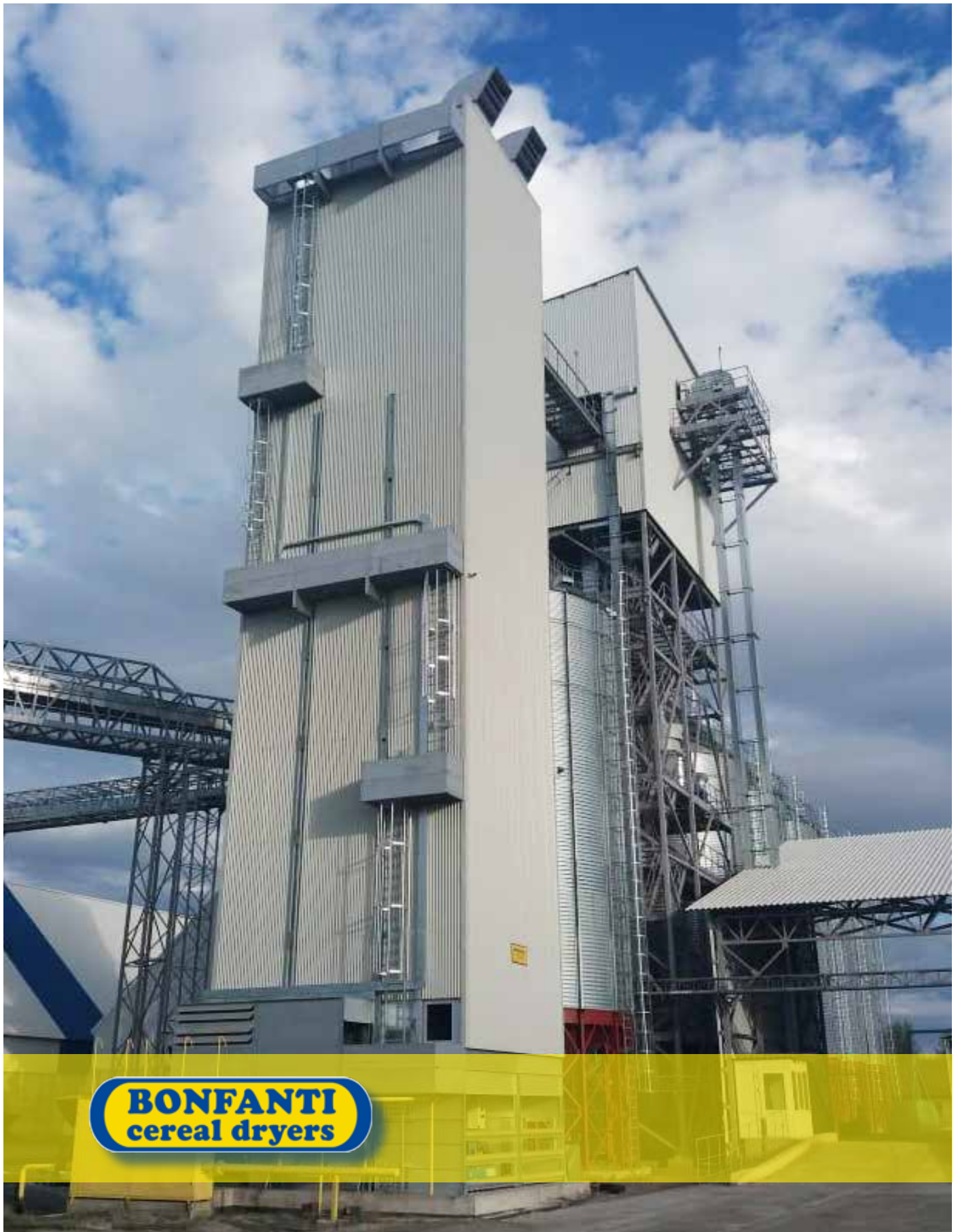
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BONFANTI
cereal dryers



Since 1979



BONFANTI
cereal dryers



IM.AG.IN solutions srl

The best in quality

BONFANTI
cereal dryers



BONFANTI
cereal dryers

IM.AG.IN solutions srl





Bonfanti dryers: a safety choice

Since 1979, the **Bonfanti** group has been specialised in realising plants for drying cereals. The company is directly responsible for sale, installation and customer service and its final goal is the client satisfaction.

The core of the group is represented by IM.AG. IN. solutions, responsible for the development of new technologies and the realisation of plants.

A point of strength is the company attention to operate in strict cooperation with the plant user by finding out its needs and by promptly fulfilling its requests. This is the reason why **Bonfanti** is constantly working with the most important agro industrial companies, which have added the company's deep technical knowledge and the possibility of accomplishing large-scale plants that can fulfil even the most demanding customers' needs.

The **Bonfanti** group constantly develops technologies focusing on the environment impact thanks to its ability to keep pace with times while preserving an excellent quality – price ratio.

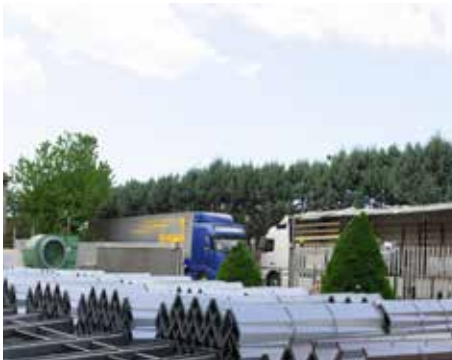
Over the years, the **Bonfanti** group has gone

through an important transformation process that has enabled the company to achieve its current size.

It has progressively increased its production capacity with attention for the constant improvement of the quality standards for the whole range.

The R&D department of **Bonfanti** group has a considerable experience in the field of research and it is constantly working with the latest tools in order to accomplish state of the art solutions and to push for higher performances. This has enabled the company to achieve highly-advanced results in any application, just as it is testified by our co-generation plants

Research and development, constant production controls, investments for a customer care service before and after sale have enabled the group to become a leading company in its own field. The relationship with the customer and the focus on its satisfaction have contributed to strengthen its presence on a more and more demanding market.



M.AG.IN. Solutions can supply a wide range of services thanks to its own organisation:



Service before sale

- Preparation of the technical documents and certificates for the submission of the request for financing;
- Cooperation with consultant's offices for advice;
- The internal technicians' inspections, on the areas that will be used for building, in order to select and erect the plant correctly;
- The plant assembly with specialised internal operators upon the customer's requests;
- Skilled technicians' supervision for the assembly performed by the personnel directly selected by the customer.



Observance of regulations

- All legal rules are widely observed. Bonfanti driers can guarantee:
- Low acoustic pollution thanks to fans complete with very large and low-speed fan wheels and the new burners insulated inside the plant
- Dust elimination: pneumatic valves, channels having an oversize cross section, internal manifolds and collection stack for a dust release into the atmosphere that is much lower than one required by the regulation;
- "ATEX" rules: all our dryers are manufactured in full compliance with this rule.



Services after sale

- On-site training of the staff intended to use the product through internal technicians;
- Phone and on-line support;
- Possibility of supervising the plant operation online through a modem.



Internal design

- Every single plant is specifically conceived for the Customer. Our designers can develop the solutions most suitable for the customers' requests by making use of the most recent information media. The constant cooperation with the purchaser can offer final results for the best fulfilment of the customer's expectations.



Process control

- The constant technological research has enabled us to realise an "antishock" system that can provide for high-quality dried cereals.
- An electrical board with a Siemens PLC controls the whole process, in particular the product temperature and humidity degree of the product.
- Thru this control, the cereal dryers Bonfanti can AUTOMATICALLY adjust to the various drying conditions while preserving the Customer's production capacity



Energy saving

- Our co-generation plant can provide for considerable energy-saving. Most hot air produced by burners is regenerated and reused in the drying cycle. This will decrease the installed electrical power up to 35% compared to traditional plants as well as considerably reduce the environmental impact.



Easy installation

- The lower base of the drying tower doesn't require special brick works: a simple cement bedplate is all that is necessary to position a Bonfanti dryer.





Cereal dryers with **continuous cycle** **with energy recovery**



Functioning mode

The cereals go into the dryer column from the top and descend by force of gravity to the inferior part.

The drying is achieved by hot air flowing through the grains with crossed draughts; our special conical ducts even air distribution and guarantee a homogeneous drying.

The necessary heat is supplied by modern gas (LPG/ methane) or gas-oil burners while the airflow as for drying process as well as for the cooling is guaranteed by the new electro-centrifugal fans.



Drying process control

The continuous technological research has permitted us to realize a system that guarantee the high quality of the dried cereal.

The electric board with PLC controls the entire process in particular the temperature and the humidity degree of the product.

The cereal dryers Bonfanti are able to automatically adapt to different work conditions always maintaining the production capacity requested by the Client.



Energy saving

Our energy – recovery plant allows for relevant energy saving: much part of the hot air produced by the burners is recovered and used again in drying cycle.





Air duct burners

It works with gaseous fuel and it is built directly in the air duct without requiring combustion chamber.

Its elongated shape offers a uniform distribution of the heat, while the wide power range allows to properly dry cereal during both winter and summer time without any intervention of the operator.

All burners are equipped with a system to detect the process air to prevent the operation of the burner in absence of primary air.

Equipped with the proper electrical board.

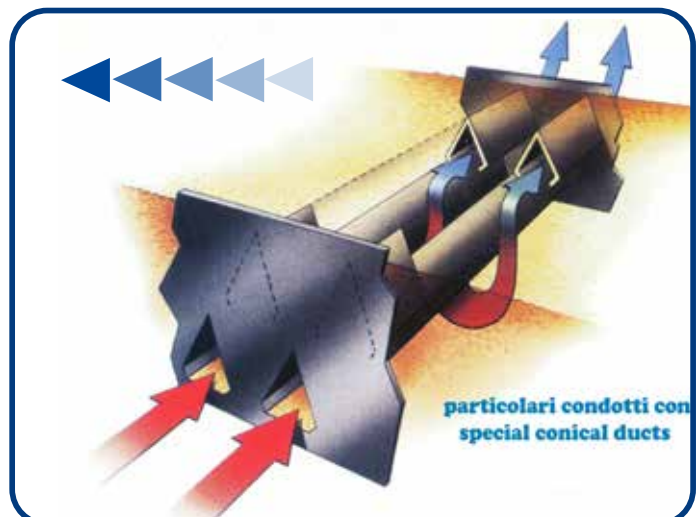


Centrifugal fans

Direct coupling with transmission

Ideal for the aspiration of the slightly dusty air.

These fans provide high efficiency and low noise: they are largely used in ventilation, drying and cooling systems, as well as mechanical draft and removal of poisonous gases.



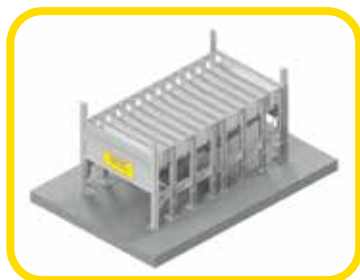


Cereal dryers

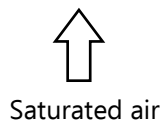
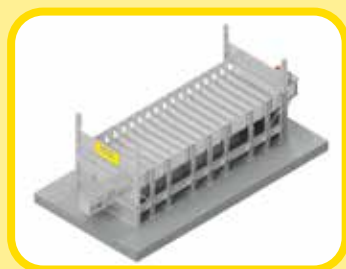
Base B



Base L



Base XL



Saturated air



High temperature air



Recovery Air



Recovery Air



Medium temperature air



Environmental air



CE type cereal dryers with continuous cycle and total energy recovery



Thermal isolation

Thermal isolation (optional) consists of a double inner tube with high efficiency.

This system is a particular type of isolation: made by two different metal plates not adjacent to each other, forming a cavity also defined as "air chamber".



Electric board

Control and monitoring electric board.

Electric board with PLC SIEMENS and with controller TOUCH SCREEN SIEMENS system TACS (Triple Automatic Control System),

able to change the working temperature as well as the frequency of unloads, measuring the humidity degree of the cereals.



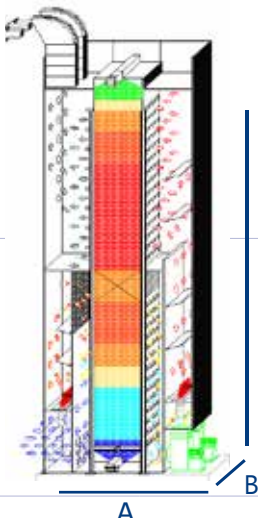
Energy saving

Our cereal dryer with energy recovery provides significant economy of the energy: most part of the hot air, produced by burners, returns and again is used in drying cycle. This permits to reduce the energy consumed up to 35% respect traditional plants.



		Model CE																	
Type		1200	1500	2000	2500	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	13000	14000	15000	
B	Capacity of corn	tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day													
	28%-14%	120	144	192	240	288													
	24%-14%	140	165	220	276	330													
	dimensions	mt	mt	mt	mt	mt													
	A	6,33	6,33	6,33	6,33	6,33													
L	B	2,5	2,5	2,5	2,5	2,5													
	C	10	11	13	15	17													
	Capacity of corn						tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day								
	28%-14%						293	390	488	585	683								
	24%-14%						337	448	561	672	785								
XL	dimensions						mt	mt	mt	mt	mt								
	A						6,33	6,33	6,33	6,33	6,33								
	B						4,0	4,0	4,0	4,0	4,0								
	C						12	15	17,5	20	23								
	Capacity of corn						tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day		
	28%-14%						688	770	853	963	1073	1183	1283	1365	1447				
XL	24%-14%						791	885	980	1107	1233	1360	1475	1570	1664				
	dimensions						mt	mt	mt	mt	mt	mt	mt	mt	mt	mt	mt	mt	
	A						6,33	7	7	7	7	7	7	7	7	7	7	7	
	B						5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	
	C						17	18,5	20,5	22,5	24,5	26,5	28	29,5	31				

FULL
OPTIONAL



**FULL
OPTIONAL**

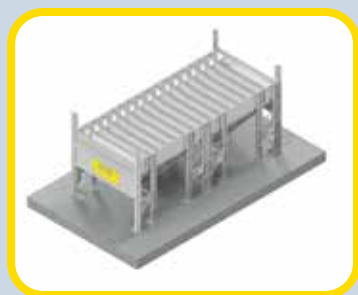




Cereal dryers

↑
Saturated air

Base B2



↑
High temperature air

↑
Recovery Air

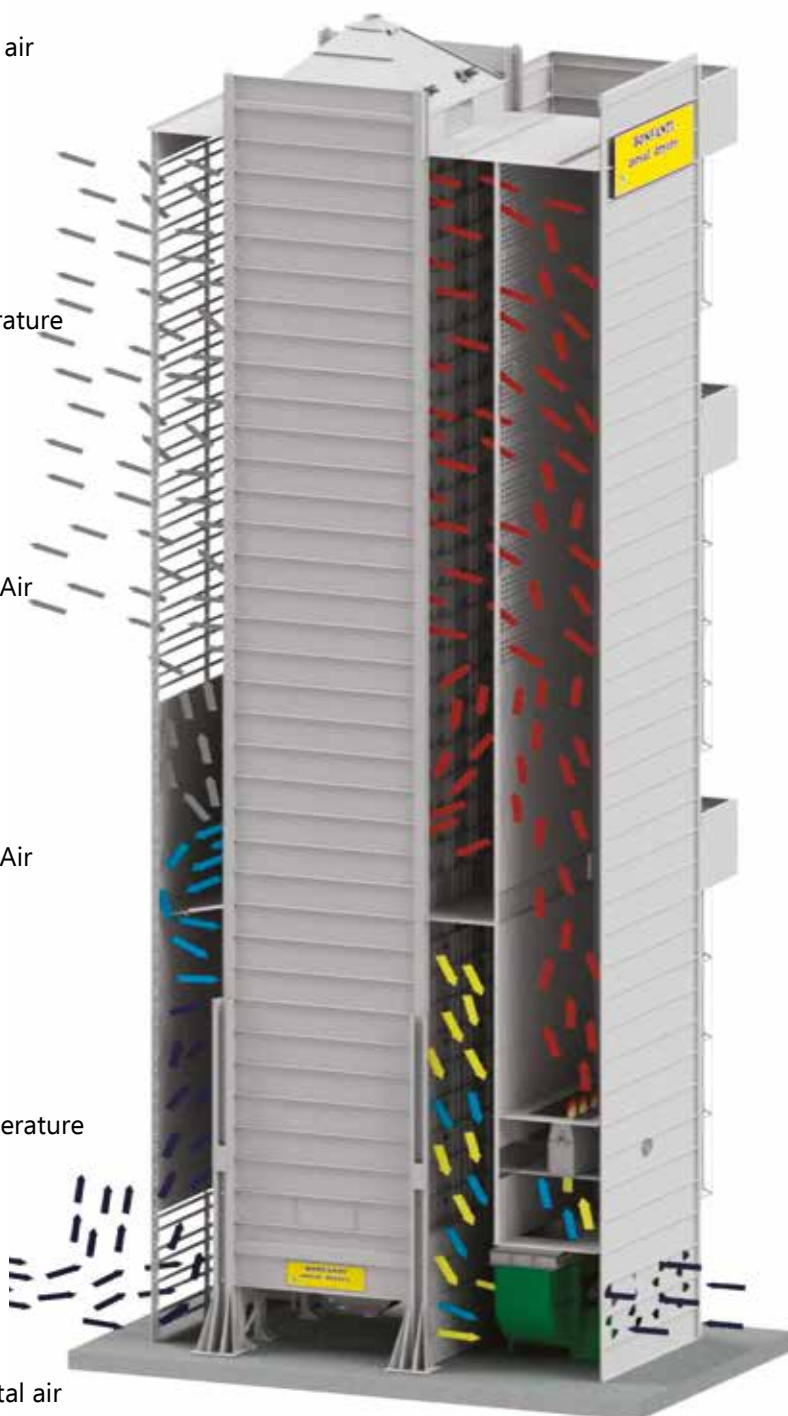
Base B



↑
Recovery Air

↑
Medium temperature air

↑
Environmental air



ECOS type cereal dryers with continuous cycle



Energy saving

Our energy-saving dryer guarantees for relevant energy saving: most part of the hot air is recovered and used again in drying cycle.

It allows decreasing the installed electric power to 30% respect traditional plants.



Electric board

Electric board with PLC SIEMENS and unit Head Control capable to activate and control the whole drying process; in particular the drying temperatures of the cereal, leaving anyway absolute freedom of choice to the Client.

It is guaranteed the automation of the whole process as well as complete possibility to work in manual mode.



Thermal isolation

Thermal isolation (optional) (optional) consists of a double inner tube with high efficiency.

This system is a particular type of isolation: made by two different metal plates not adjacent to each other, forming a cavity also defined as "air chamber".



Model ECOS											
Type		1200	1500	2000	2500	3000	4000	5000	6000	7000	8000
B	Capacity of corn	tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day				
	28%-14%	120	144	192	240	288	384				
	24%-14%	140	165	220	276	331	440				
	dimensions	mt	mt	mt	mt	mt	mt				
	A	4,3	4,3	4,3	4,3	4,3	4,3				
	B	2,5	2,5	2,5	2,5	2,5	2,5				
B2	Capacity of corn						tonnes a day	tonnes a day	tonnes a day	tonnes a day	tonnes a day
	28%-14%						384	480	576	680	768
	24%-14%						440	552	662	782	883
	dimensions						mt	mt	mt	mt	mt
	A						4,3	4,3	4,3	4,3	4,3
	B						5	5	5	5	5
							13	15	17	19	21

