

Rev. 00/00



## Aeration systems

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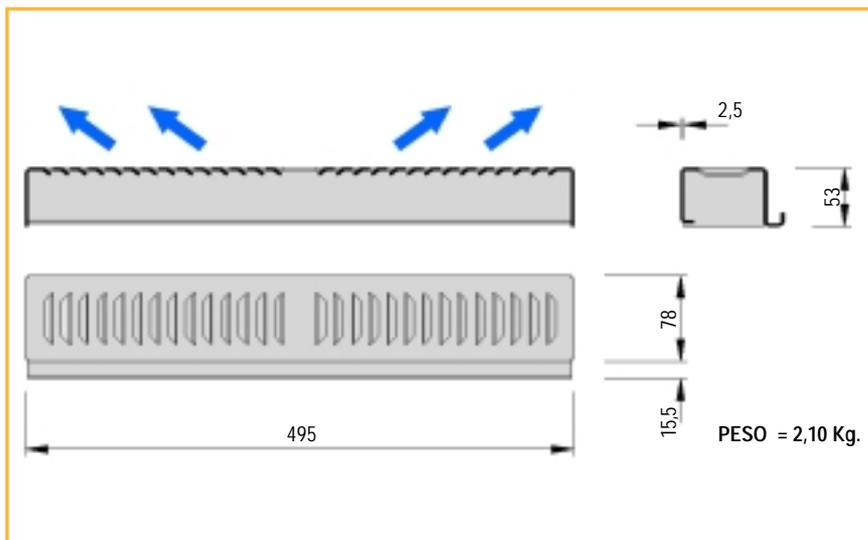


## AERATION PLATES LM 74

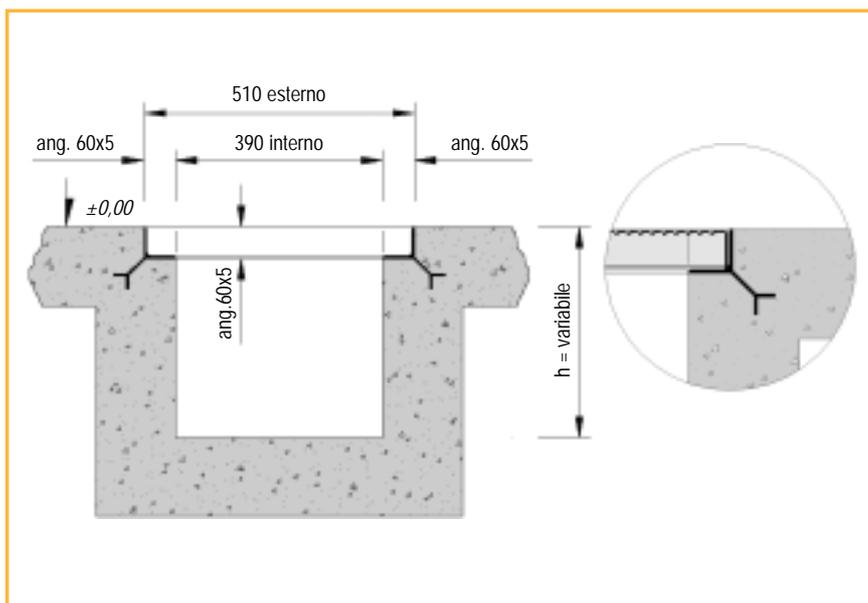
The aeration plates LM 74 have been studied to cover the below-floor aeration ducts in flat stores. Their structure allows us to make the best use of the store surface.

- no encumbrance over the floor level
  - completely practicable by all types of motor-vehicles.
- Their main features are:
- optimisation of the relation between total surface and aeration surface
  - optimisation of the relation between the dimensions of the ventilation duct and resistance to load
  - easy to assemble and to disassemble

The LM74 aeration plates are made with galvanised steel sheets, shaped to facilitate the linking to the various elements: these have two series of slits disposed in opposite directions, with a section calculated so as to obtain the maximum passage of air (about 9%) without letting the grains of wheat enter in the duct.



The LM 74 aeration plates allow us to realise sized ducts, with the use of ventilation and cooling units of important dimensions without loss of load capacity and using simple distribution schemes, generally not very expensive. The system, according to which the plate leans on an angular 60X60, avoids the encumbrance over the floor level (this is important to operate without problems inside the stores with loading shovels) and makes easier the cleaning of the aeration system.

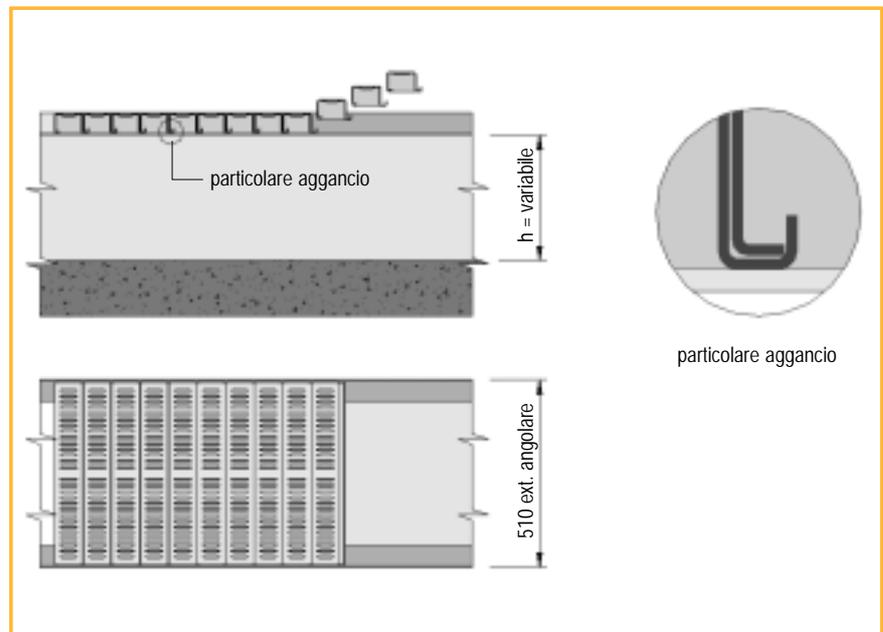


A particular attention has been reserved to the vertical load resistance. In flat stores there can be trailer-trucks, loading shovels, shunters etc. The LM 74 aeration plates have been studied to

resist to a maximum load of 4000 kg. per wheel so as to be completely practicable by all types of motor-vehicles.



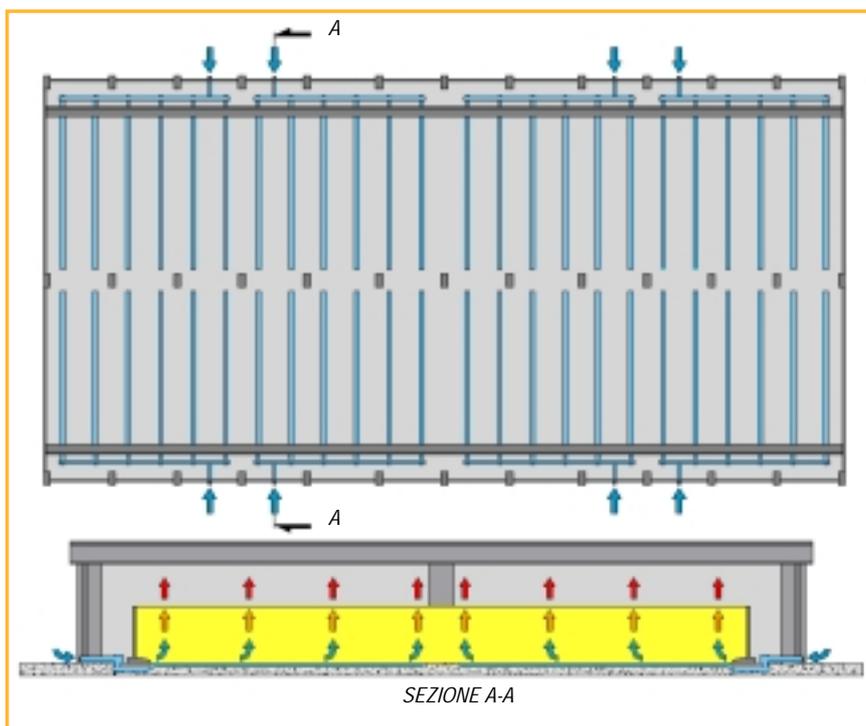
The air ducts have to be easily accessible. The passage of dust and of fragments of the product through the slits may reduce, in the long run, the section of the duct and cause loss of capacity that compromises the ventilation and cooling activity. Besides this, the stagnation of these products represent the ideal place for the proliferation of insects, rats, moulds and other parasites particularly dangerous for the product. The simplicity of assembling and disassembling of the LM 74 plates becomes a particularly important aspect to get the best results in the preservation of the product: the plates are simply leant to the angulars on the two sides of the duct and clasp the one with the other without any fastening system.



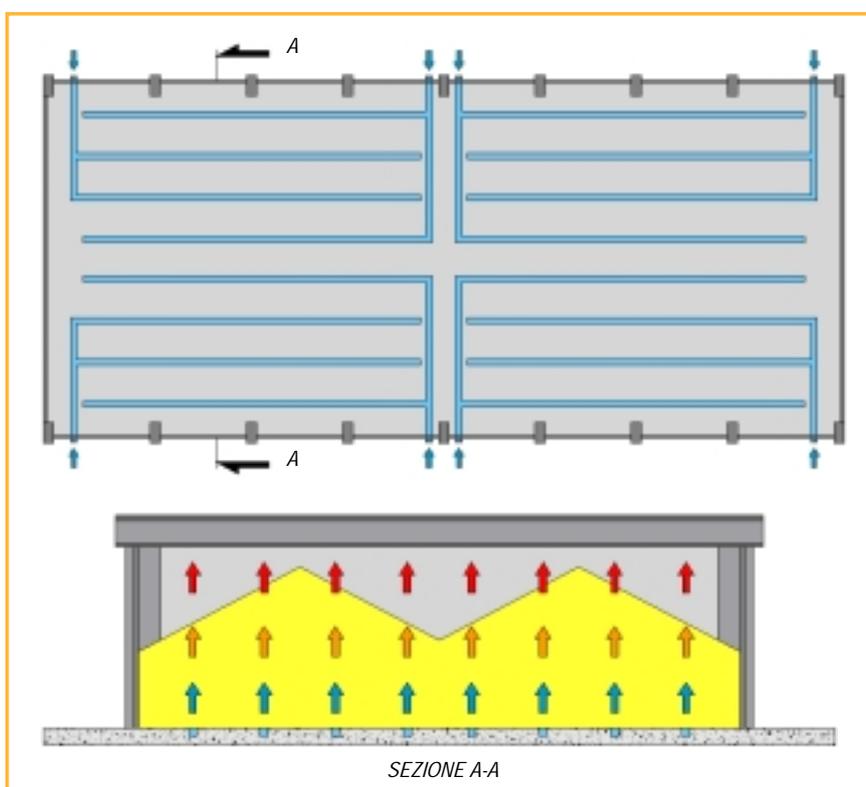
The LM 74 aeration plates are widely used for the ventilation of every flat store. Their dimensions allow us to realise simple, effective and usually not expensive solutions, according to the store dimensions, to the limits of its access and to the way in which the product is loaded (Figures 5-6).

To calculate the number of pieces consider that one meter of duct includes 12,8 LM 74 aeration plates.

VENTILATION WITH LEVELED PRODUCT



VENTILATION WITH HEAP OF PRODUCT



Our Technical Service, with its twenty-year experience in the field, is at your disposal to study and suggest the best solutions for efficient ventilation systems. Do not hesitate to contact us , a good aeration system is the best investment for the preservation of the product stored.

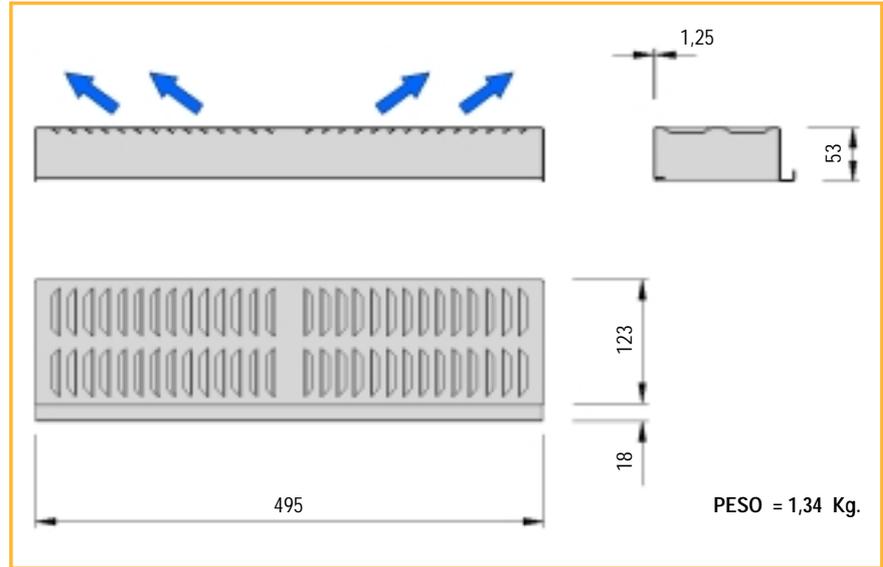
**AERATION PLATES LM 124**

The aeration plates LM 124 have been studied to cover the aeration ducts in storage silos with flat basis.

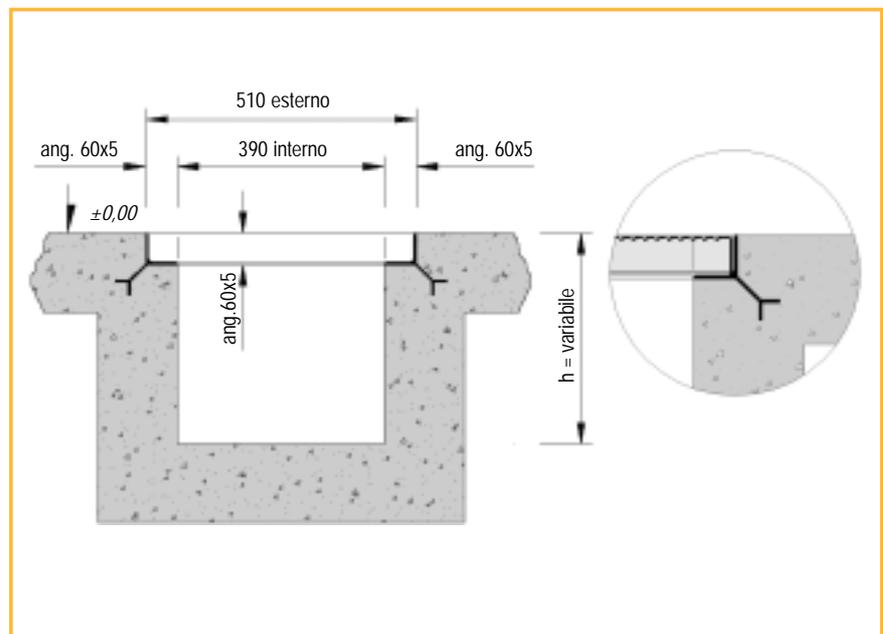
Their main features are:

- optimisation of the relation between total surface and aeration surface
- easy to assemble and to disassemble

The LM 124 aeration plates are made with galvanised steel sheets, shaped to facilitate the linking to the various elements: these have four series of slits in couples disposed in opposite directions, with a section calculated so as to obtain the maximum passage of air (about 11%) without letting the grains of wheat enter in the duct as reported in the following figure.

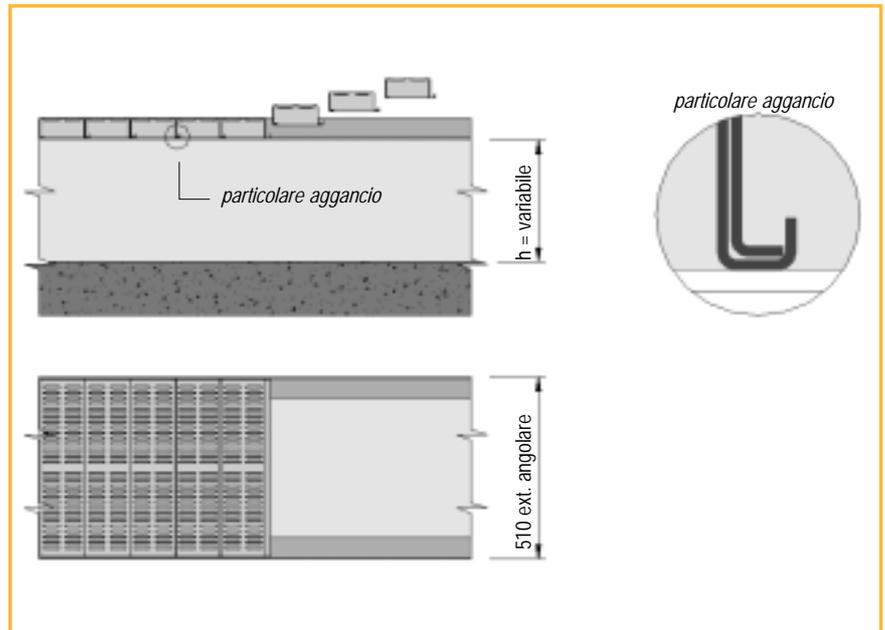


The LM 124 aeration plates allow us to realise sized ducts, with the use of ventilation and cooling units of important dimensions without loss of load capacity and using simple distribution schemes, generally not very expensive. The system, according to which the plate leans on an angular 60x60, avoids the encumbrance over the floor level (this is important to operate with automatic unloading systems) and makes easier the cleaning of the aeration system..



The air ducts have to be easily accessible. The passage of dust and of fragments of the product through the slits may reduce, in the long run, the section of the duct and cause loss of capacity that compromises the ventilation and cooling activity. Besides this, the stagnation of these products represent the ideal place for the proliferation of insects, rats, moulds and other parasites particularly dangerous

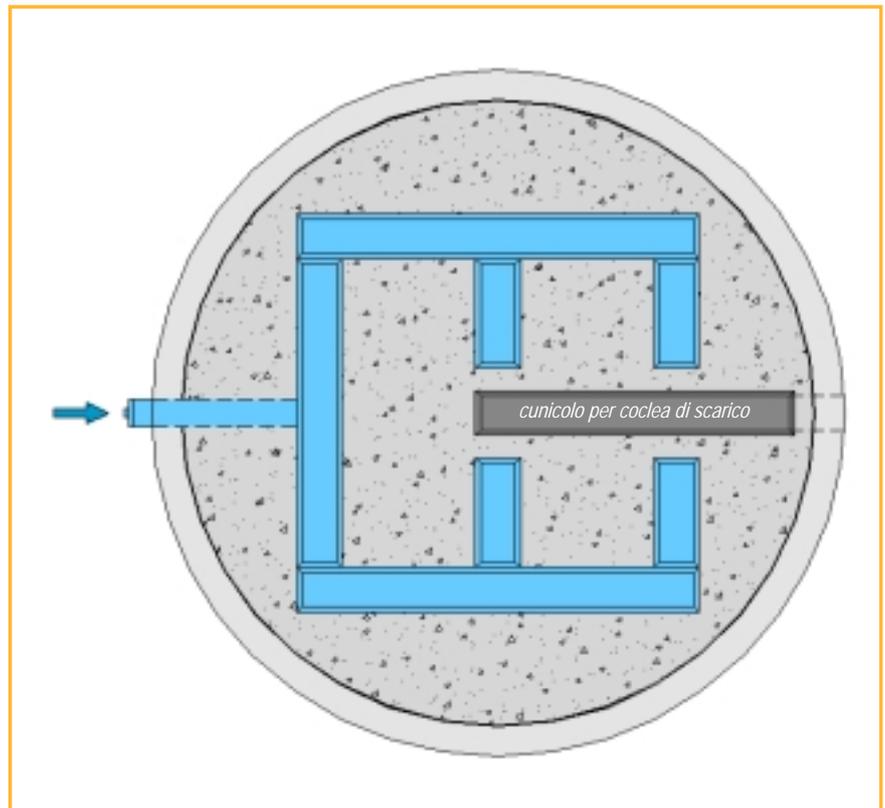
for the product. The simplicity of assembling and disassembling of the LM 124 plates becomes a particularly important aspect to get the best results in the preservation of the product: the plates are simply leaned to the angulars on the two sides of the duct and clasp the one with the other without any fastening system.



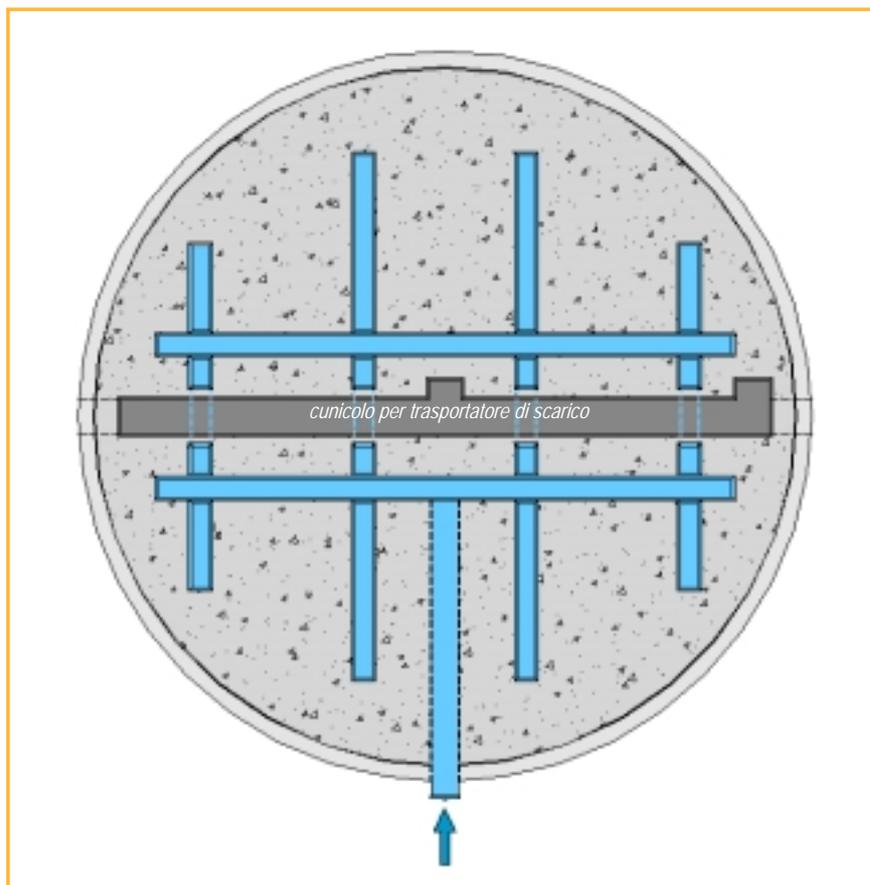
The LM 124 aeration plates are widely used for the ventilation of silos with flat basis. Their dimensions allow us to realise simple, effective and usually not expensive solutions, according to the silos dimensions as reported in the following examples.

To calculate the number of pieces consider that one meter of duct includes 8,0 LM 124 aeration plates.

#### VENTILATION ON A SMALL DIAMETER SILOS



## VENTILATION ON A BIG DIAMETER SILOS



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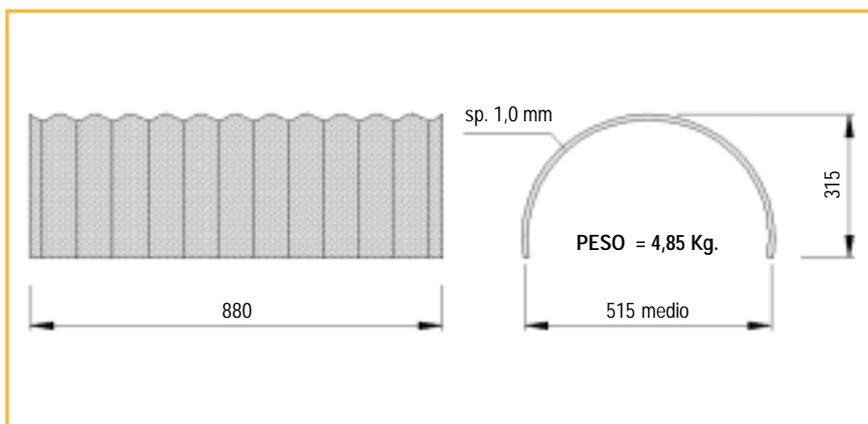
## VAULT AERATION DUCTS CM 160

The vault aeration ducts CM 160 represent the best solution for the realisation of above-floor ventilation systems in storage silos and in flat stores.

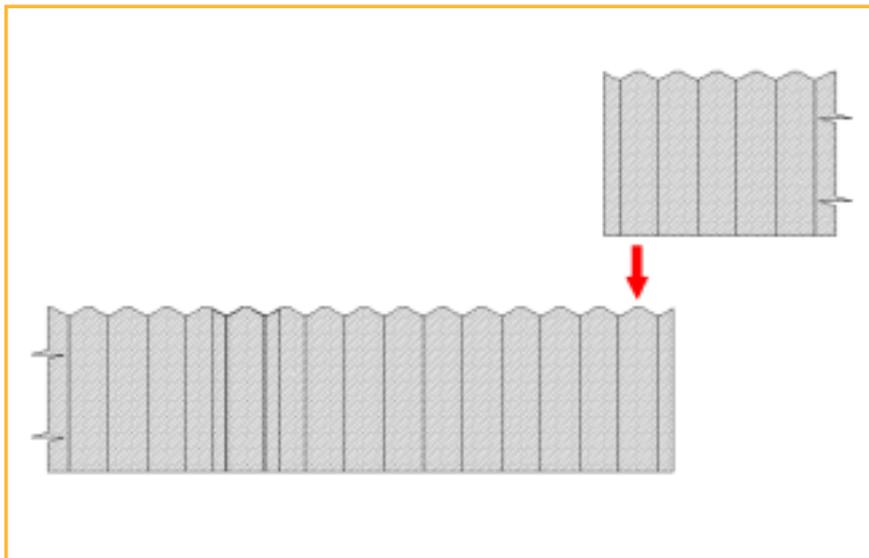
Their main features are:

- optimisation of the relation between total surface and aeration surface
- easy to assemble and to disassemble
- modular conception and flexibility of employ

The CM 160 vault aeration ducts are made with perforated galvanised steel sheets. The undulation and the particular profile ensure a great resistance and endurance even with considerable loads. The section and the step of the holes grant the maximum passage of air (about 20%) without letting the grains of wheat enter in the duct.



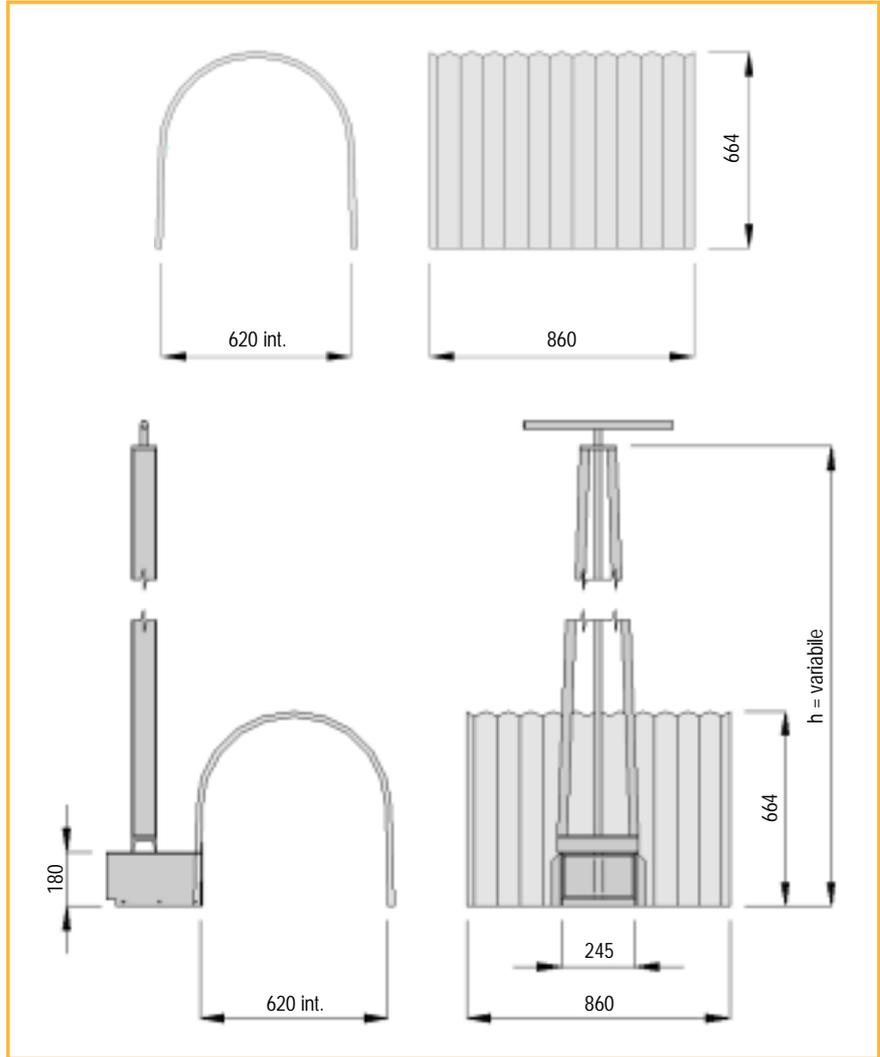
The laying of the CM 160 vault aeration ducts is particularly easy and fast with the overlapping of one or more waves.



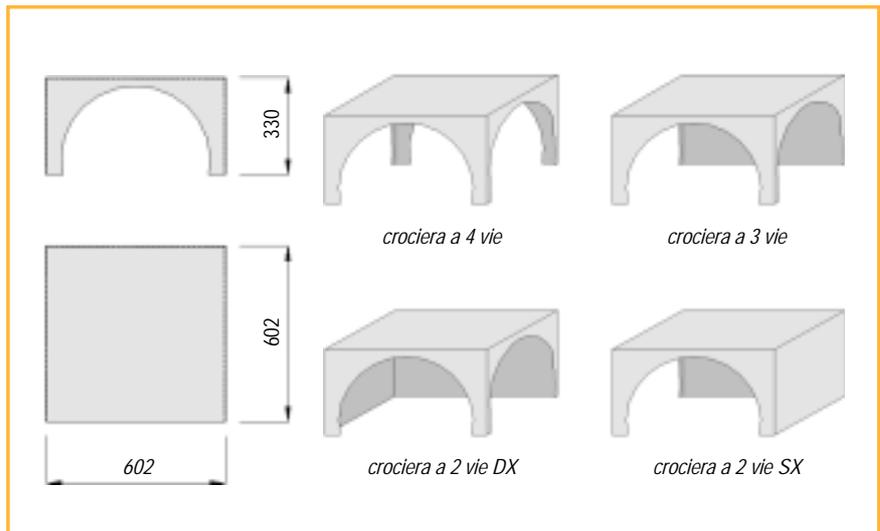
After use, the vault ducts can be easily removed and palletised leaving the silos or store floor completely clear.

To calculate the number of pieces consider one CM 160 vault for 830 mm of ventilation duct.

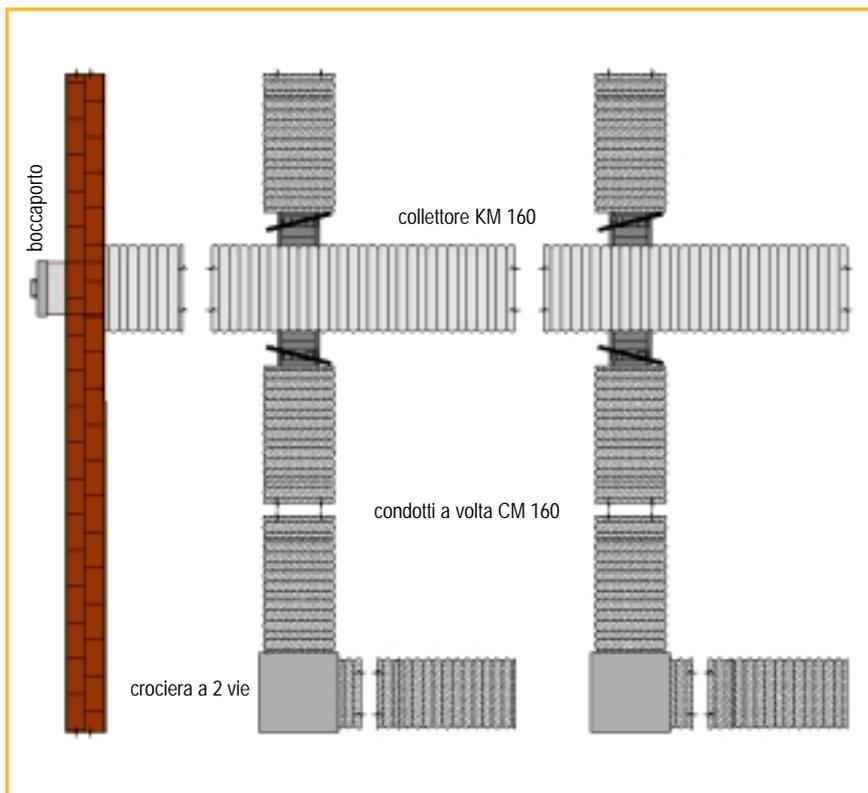
The accessories for the connection are standard and allow us the maximum flexibility for the realisation of the air distribution system. The KA 160 main manifolds have proper dimensions and accessories to be connected to more than one aeration line of CM 160 vault aeration ducts. The possibility to provide these manifolds with air locks allow us, if necessary to split the aeration system with remarkable economic advantages. Even the KA 160 manifolds are modular, made with galvanised steel sheets, undulated and with the same features of resistance and endurance of the CM 160 vault aeration ducts. The standard supplying includes intermediate standard elements and elements with air locks as reported in the following picture.



The switching element are made with galvanised steel sheets, two, three or four-way.



The CM 160 vault aeration ducts and its accessories are widely used for the ventilation of every flat store. Their dimensions allow us to realise simple, effective and usually not expensive solutions, according to the store dimensions, to the limits of its access and to the way in which the product is loaded as reported in the following picture.



They represent the best solution to endow your store with an efficient aeration system without incurring costs for the modification of the floor to use air distribution systems with below-floor plates LM 74.

The CM 160 vault aeration ducts can be used also for the concrete or steel vertical silos, flat basis that haven't been provided with an aeration system even if, in this case, it is necessary to consider the compatibility with eventual unloading systems of the residual cone.

Our Technical Service, with its twenty-year experience in the field, is at your disposal to study and suggest the best solutions for efficient ventilation systems. Do not hesitate to contact us, a good aeration system is the best investment for the preservation of the product stored.





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## RETAILER

A large, empty rectangular box with a thin black border, intended for the retailer's name and contact information.