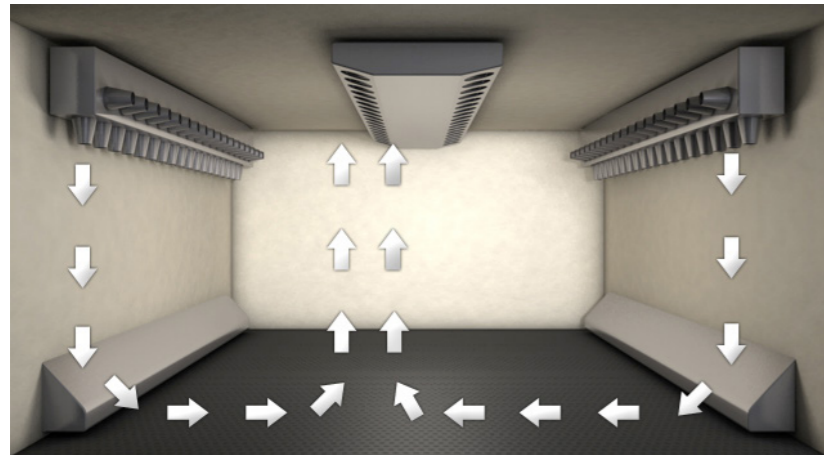


BENEFITS

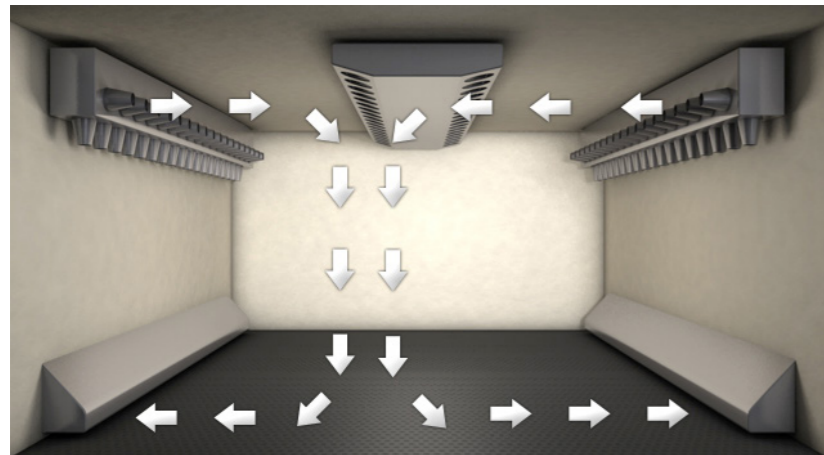
1. TOP ENERGY EFFICIENCY
2. ABSOLUTE CONSISTENCY IN PROCESSES & PRODUCTS
3. HIGH LEVEL OF FLEXIBILITY
4. CAPTIVATING QUALITY
5. OUTSTANDING HYGIENE

FLOW CONDITIONS



Maturing, drying and smoking: the CLIMAMAT climatic maturing installation sets standards. Your products are treated particularly gently and reliably whilst achieving a high degree of standardization.

The adjacent illustration shows the TWIN variant. Here, the vertical air flow of the classic climatic maturing installation is combined with the horizontal air flow of the storage room. The switch between air directions can be controlled automatically or manually.



Air flow conditions inside the chamber are of key importance in guaranteeing the consistency of your products. The tried and tested air change flap system takes care of this.

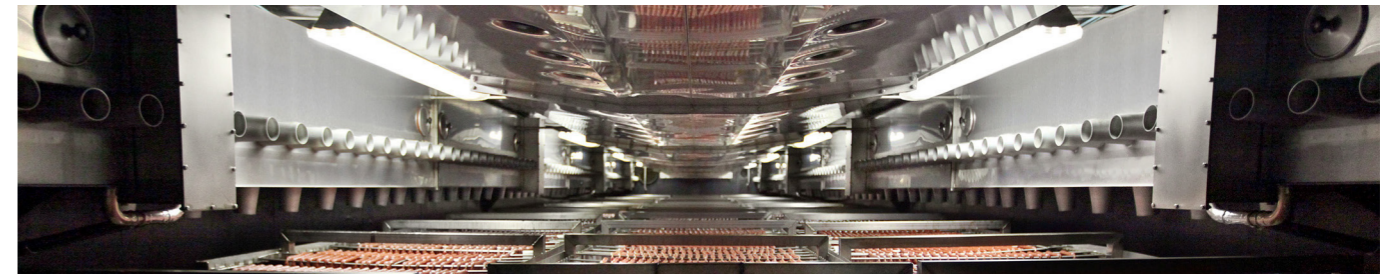
The patented automatic circulating and fresh air systems give you the right tool for controlling these processes reliably and reproducibly.

Fig. VEMAG ANLAGENBAU air change flap, here on a CLIMAMAT^{TWIN}

VARIANTS

CLIMAMAT^{TWIN}

The TWIN variant combines the classic process steps of pre-maturing and post-maturing in a single installation.



OPTIONS



SMOKE GENERATOR

We supply glowing smoke generators, liquid smoke systems and friction smoke generators as options for a huge variety of smoking processes.



CENTRAL MANAGING AND DOCUMENTATION SYSTEM (MICROMAT^{ANALYZER})

The system reduces complex production processes and a wide-ranging distribution of installation components to a reliable and convenient general overview for the operator.



ETHERNET CONNECTION

Messages are e-mailed to a defined e-mail distribution list.



FULLY AUTOMATIC CIP SYSTEM

Fully automatic central cleaning achieves the best hygiene.



ADDITIONAL DUCT CLEANING

Additional spray nozzles in the injection duct achieve maximum hygiene.



TYPE OF COOLING MEDIUM

The installation can be designed for the cooling media liquid ammonia, Freon or glycol.



TYPE OF HEATING

The climatic maturing installations are available heated by hot water, steam, electricity and thermal oil.



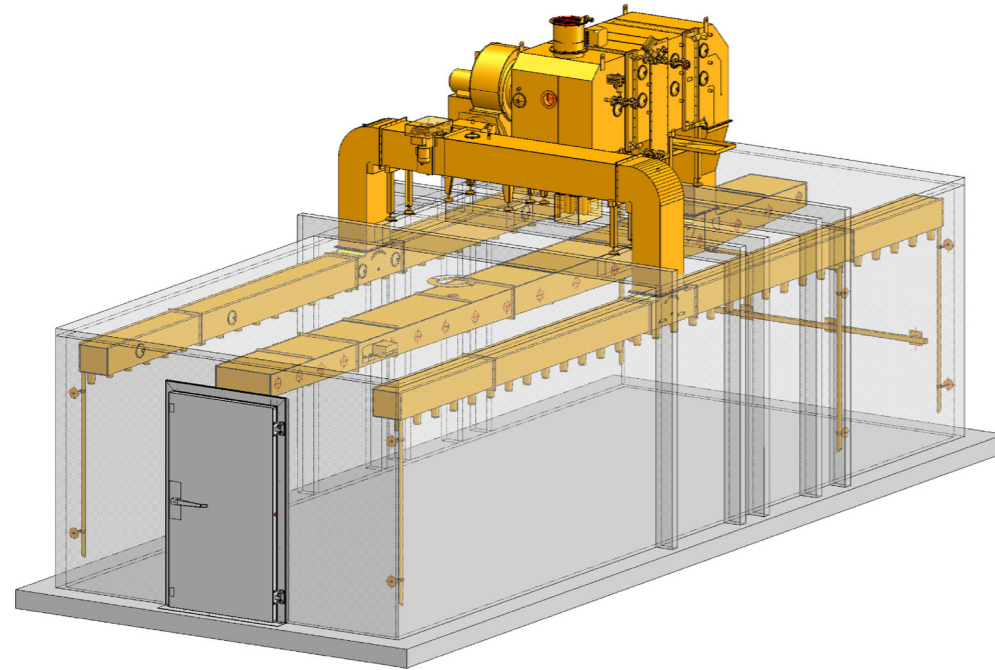


Fig.1 CLIMAMAT with vertical air flow

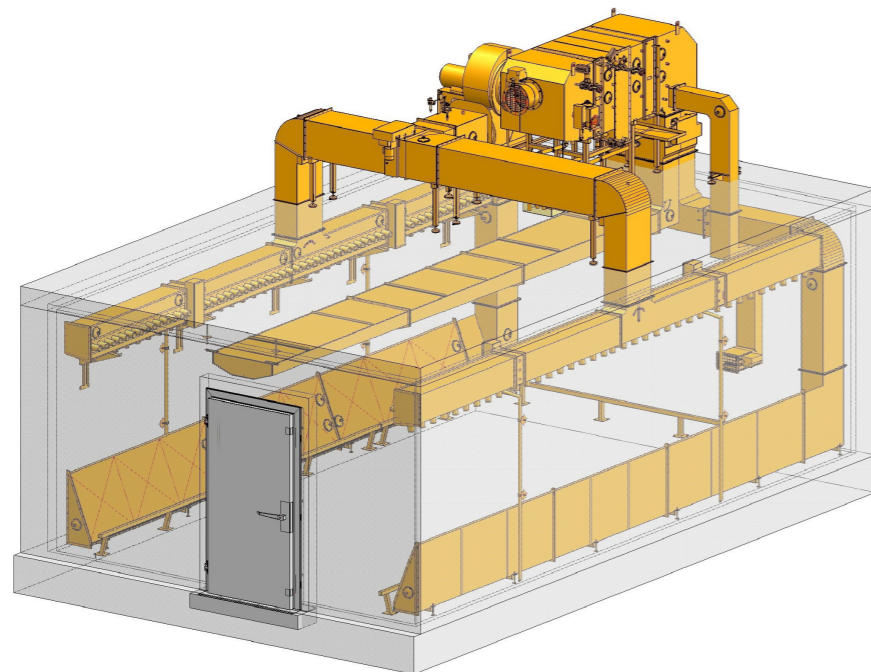


Fig.2 CLIMAMAT TM

Exploit the potential of our installations to the economic maximum by using our world-wide network of consultants.

Feel free to contact us:

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CLIMAMAT

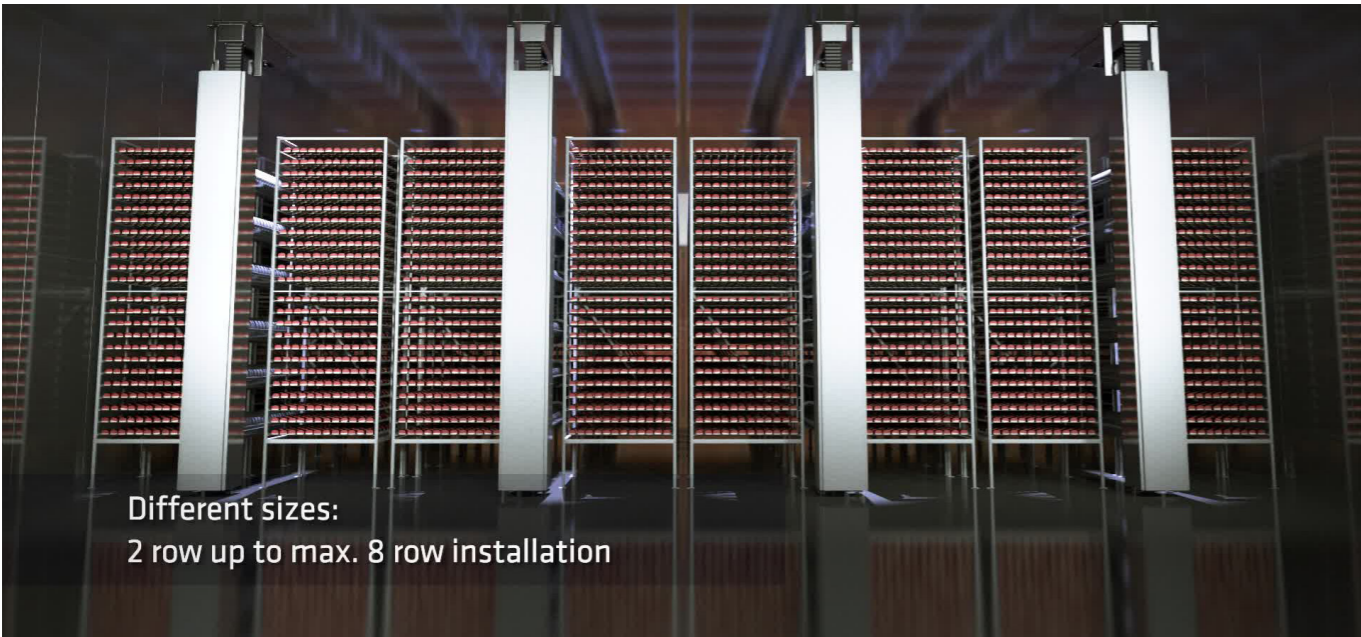
CLIMAMAT are climatic maturing installations for a variety of thermal treatment processes. The installations for maturing and cold-smoking are equipped with individual air flow systems and can be adapted on a customer-specific basis to suit both products and production capacities, as well as local conditions.



The Challenge:

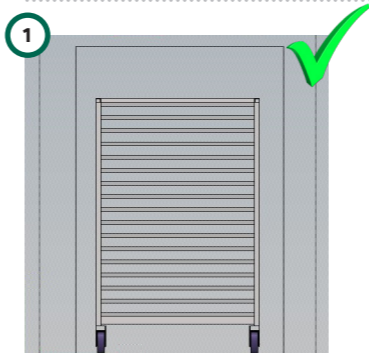
More layers, highest performance

Regular bulging product capacities are inevitable for every modern, expanding company. Mostly those are limited by technical solutions or storing space. The new innovative CLIMAMAT^{CROSS} is the ideal solution to raise your outcome at a steady storing volume, without any quality loss.

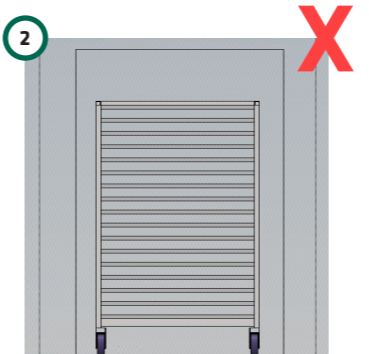


The solution:

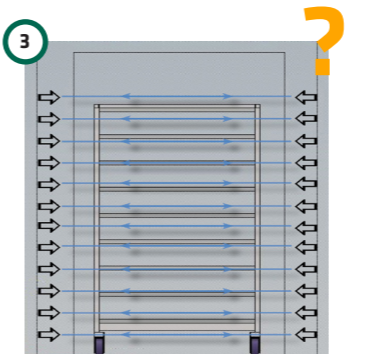
Our innovative air flow system



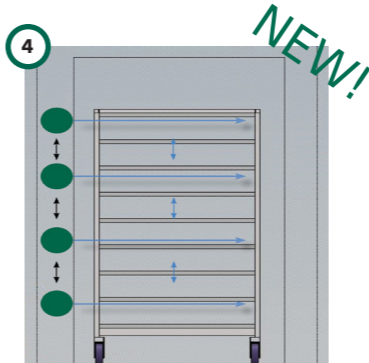
Lying products are more cost, time and staff saving compared to hanging ones and can save up to two working steps. When the gap between the layers is big enough, you can easily use conventional installations. Our established VEMAG ANLAGENBAU air change flap guarantees to reach every product and provides consistent treatment.



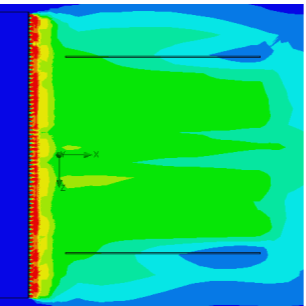
With smaller gaps between the layers it's possible to treat more products with each batch. But in consequence of less space, the air cant stream effectively through the trolley. This leads to irregularities.



This problem can be solved by installing horizontal inblow ducts without the need to buy any further installations. Those ducts lead the airflow sideways through the trolley. But those static constructions only work on one-row installations, because a lot of air outlets in long installations lead to a low air exit velocity. That means neither high chambers, nor multi row installations are possible.



The solution is the new VEMAG ANLAGENBAU CLIMAMAT^{CROSS}. The unique, innovative air flow system with moving ducts provides a dynamic and consistent perfusion of the layers.



As to be seen in this streaming simulation, even densely packed layers can be treated perfectly to reach a consistent outcome.

Applications & Processes

Regardless of whether meat or sausages, fish, bread, pet food or cheese, VEMAG ANLAGENBAU offers customer specific solutions for the thermal treatment of your products.

Smoking



Black Forest Ham

Storing



Caseless Salami

Fermentation



Pepperoni Salami

Cooling



Dark Bread

Drying



Dried Klipfish

Thawing



Frozen Meat Blocks

For an optimal and efficient workload of our installations, ask for our service of worldwide operating consultants:

VEMAG ANLAGENBAU GmbH

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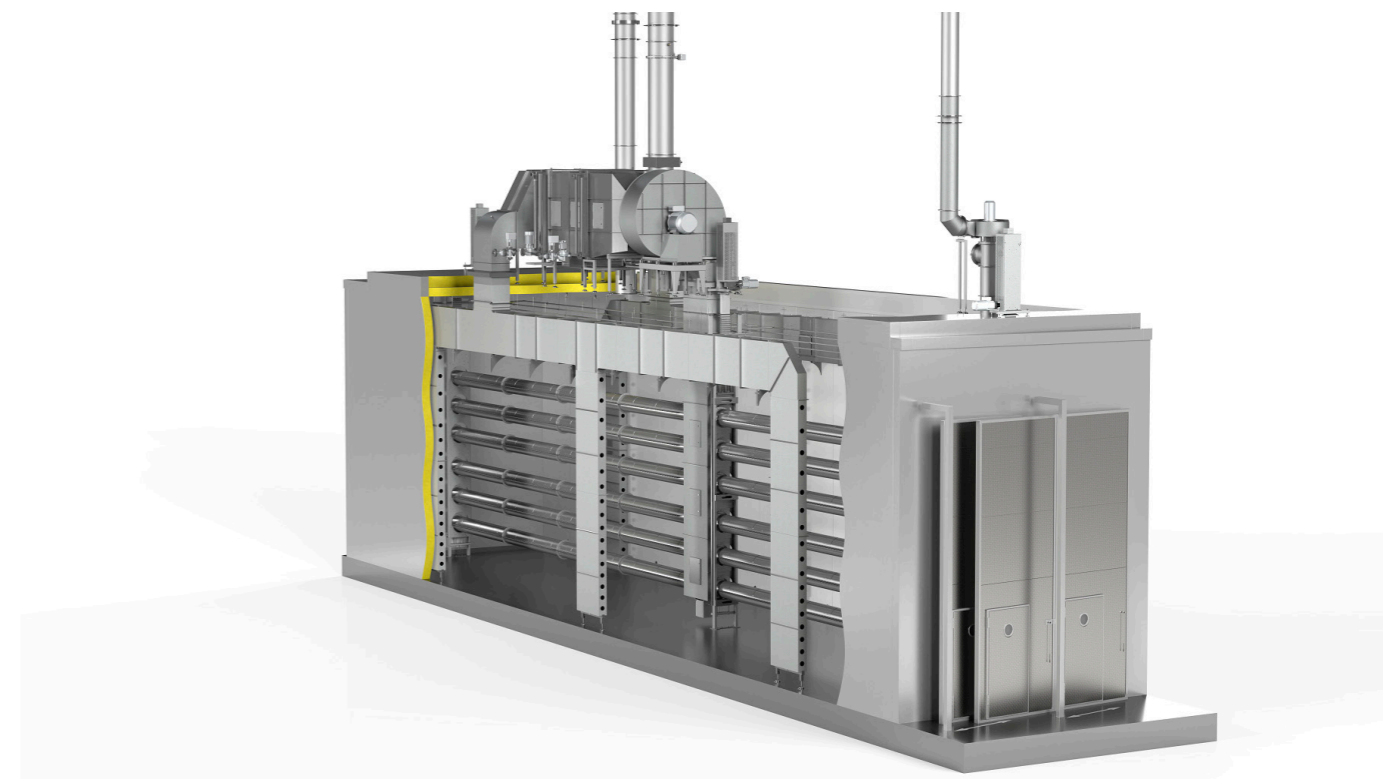
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PRODUCT INFORMATION

CLIMAMAT^{CROSS}

The CLIMAMAT^{CROSS} is the perfect solution for even smoking, maturing, drying or thawing of dense packed, lying products. The innovative, moving ducts provide all layers with air evenly. For perfect and reproducible outcome on narrow space, every layer is specifically supplied with air.



BENEFITS

1. TOP ENERGY EFFICIENCY
2. HIGH LEVEL OF FLEXIBILITY
3. CAPTIVATING QUALITY
4. OUTSTANDING HYGIENE

FLOW CONDITIONS



Controlled process management is required in order to guarantee economical thawing which is gentle on products. We use automatic interval and temperature processes as a function of surface temperature to guarantee an optimum thawing result. Core and surface temperature are recorded by sensors on the product and used for a control process perfectly adapted to suit your product.

The tried and tested air change flap system ensures a dynamic and even distribution of air in the chamber. The products are heated reliably and gently in the stream of air.

To learn more about the CLIMAMAT^{DEFROST}, scan the QR Code below:



Fig. of thawing process

OPTIONS



CENTRAL MANAGING AND DOCUMENTATION SYSTEM (MICROMAT^{ANALYZER})

The system reduces complex production processes and a wide-ranging distribution of installation components to a reliable and convenient general overview for the operator.



ETHERNET CONNECTION

Messages are e-mailed to a defined e-mail distribution list.



AUTOMATIC FLOOR CONVEYOR

If you select the automatic floor conveyor and the transit design, you have the option of largely automating your thawing installation.



AUTOMATIC CONVEYING OF SUSPENDED TROLLEYS

As an alternative to the automatic conveying of floor-running trolleys, we also offer automatic conveying of suspended trolleys.



METAL CHAMBER

In addition to your own design, you have the option of acquiring a metal chamber tailored to your requirements.

TECHNICAL DATA

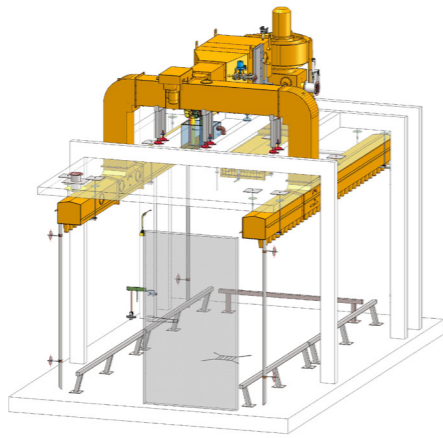


Fig.1 CLIMAMAT^{DEFROST}

	NUMBER OF TROLLEYS	INTERNAL DIMENSIONS		EXTERNAL DIMENSIONS	
		LENGTH	WIDTH	CHAMBER HEIGHT MACHINE REAR	CHAMBER HEIGHT MACHINE TOP
		mm	mm	mm	mm
1-ROW	3	3300	1800	2700	2700
	4	4350	1800	2700	2700
	5	5400	1800	2700	2700
2-ROW	4	2250	3100	2700	2700
	6	3300	3100	2700	2700
	8	4350	3100	2700	2700
	10	5400	3100	2700	2700
	12	6450	3100	2800	2800
	14	7500	3100	2800	2800
	16	8550	3100	2800	2800
	18	9600	3100	2800	2800
3-ROW	20	10650	3100	2800	2800
	12	4350	4100	2800	2600
	15	5400	4100	2800	2600
	18	6450	4100	2800	2600
	21	7500	4100	2800	2600
	24	8550	4100	2900	2700
	27	9600	4100	2900	2700
	30	10650	4100	2900	2800
	33	11700	4100	2900	2800
	36	12750	4100	2900	2800

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PRODUCT INFORMATION

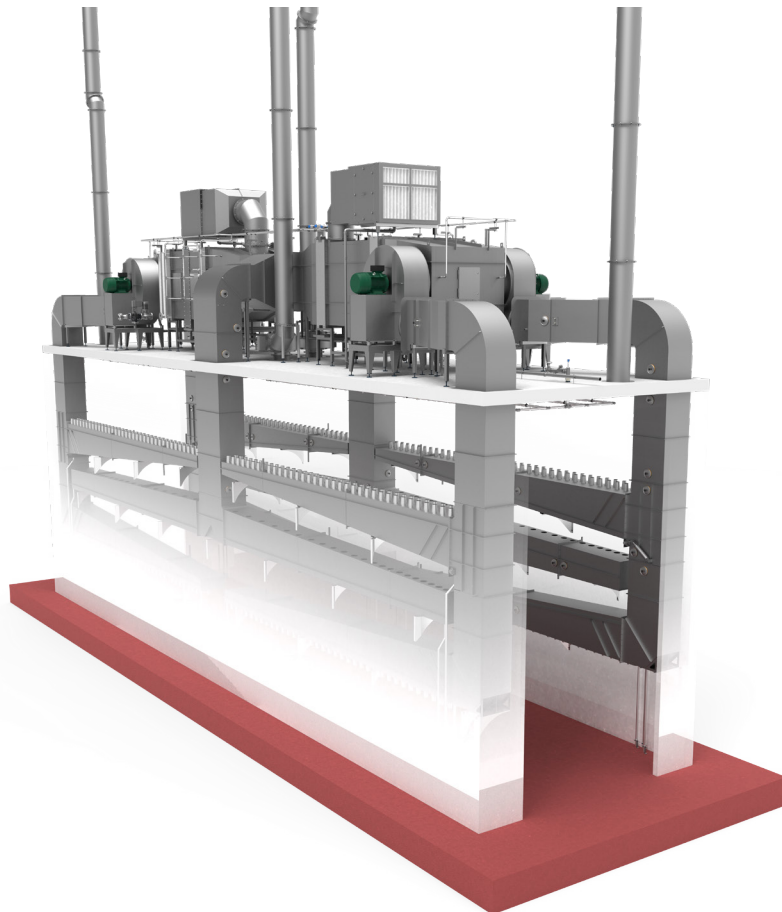
CLIMAMAT^{DEFROST}

The CLIMAMAT^{DEFROST} is an installation for particularly gentle, quality-conscious thawing of deep-frozen products. Thawing is effected by means of air. The product for thawing can be open or packed. Whole blocks or individual products can be thawed. As an option, the thawing installation can also be used as a cooling store. ❄️



CLIMAMAT^{HIGHCUBE}

CLIMAMAT^{HIGHCUBE} is the efficient way to mature, cure and store dry meat and salami products for high racks (up to 5 meters). Racks are automatically loaded, unloaded and transported by AGV. The AGV can measure dry loss automatically during the complete process. Engineering and technology are based on our tried and tested climatic maturing installations CLIMAMAT series.



OVERVIEW

DIFFERENT LOADING CONCEPTS

CONCEPT I



CONCEPT II



CONCEPT III

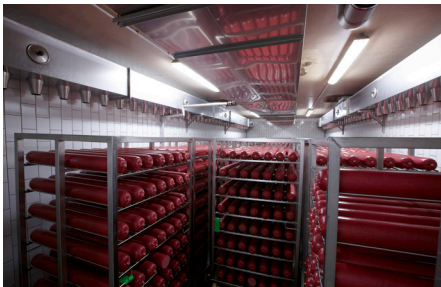


TROLLEY / RACK HEIGHT	2 m - 2,5m	2 m - 3 m	3,5 m - 5 m
ROOM HEIGHT	Maturing 3 - 4,5 m Storage 3 - 4,5 m	Maturing 3 - 4,5 m Storage 5 - 6 m	Maturing 5 - 6 m Storage 5 - 6 m
TRAVELLING	Manual (wheels)	Fork lift	AGV or hanging
LOAD PER M ³	++	+	0 (10 - 20% less than 2 m trolley)
LOAD PER M ²	0/0	0/++	++/++
DRYING RATE	Low to very high	Low to very high	Low to medium
MEASURING WEIGHT	Manual	Manual	AGV (automatic)
SPACE REQUIREMENT FOR LOADING	++	++	--
SPACE REQUIREMENT FOR DRYING	0/0	0/++	++/++
MANPOWER COSTS	High	High	Low
INVESTMENT COSTS	Low	Low	High
INVESTMENT COSTS BUILDING	0 same floor (+ several floors possible)	+	++/+
		(less space drying)	(less space, but more space for handling)

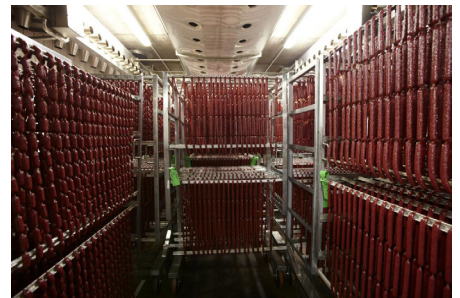
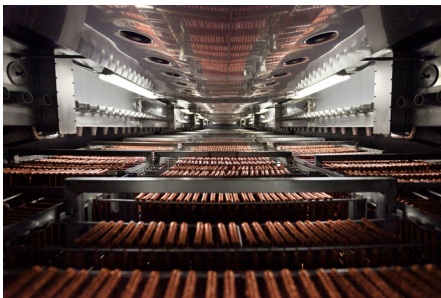
OVERVIEW

PERFECT SOLUTIONS FOR INDIVIDUAL REQUIREMENTS MATURING - COLD SMOKING - DRYING

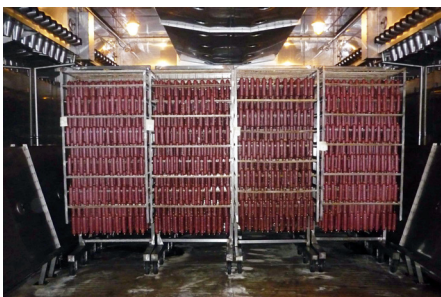
CLIMAMAT - Perfect solution for a high variety of products & applications



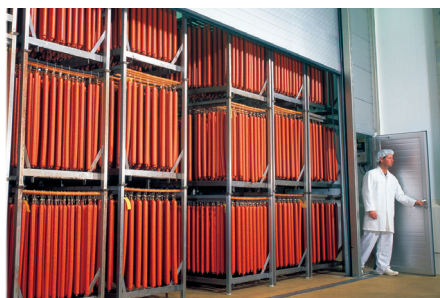
CLIMAMAT ^{TWIN} - Especially designed for snack salamis



CLIMAMAT ^{TEXTILE} - Individual solution for all kinds of raw sausages & cured meat products



CLIMAMAT ^{HIGHCUBE} - Perfect solution for low space & high capacities



FLOW CONDITIONS

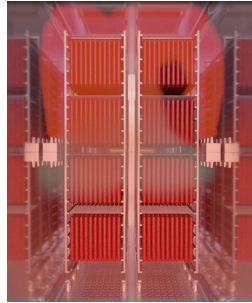
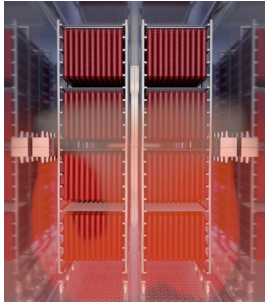


Fig. 1 Air flow inside the chamber controlled by the air change flap system: drying in two steps

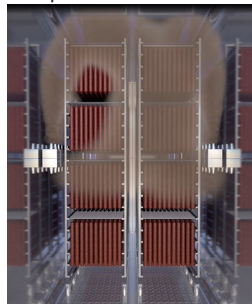
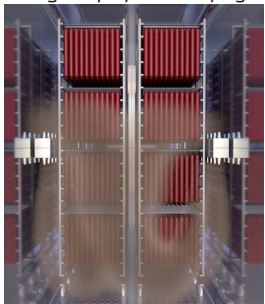


Fig. 2 Smoke flow inside the chamber controlled by the air change flap system: smoking in two steps

Maturing, drying and smoking: the CLIMAMAT^{HIGHCUBE} installations sets standards. Your products are treated particularly gently and reliably whilst achieving a high degree of standardization.

The illustration shows the air and smoke flow inside the chamber which is based on the principle of CLIMAMAT series. They are extremely important in guaranteeing the consistency of products if you want to operate continuously. The tried and tested air change flap system takes care of this.

Drying and smoking in two steps: at first the bottom part of the products will be treated. In the second step air circulation will be switched and the top part of the products will be treated.

The circulating and fresh air system give you the right tool for controlling these processes reliably and reproducibly.

BENEFITS

HIGH DEGREE OF AUTOMATION & FLEXIBILITY

1.

- ❑ You achieve a space-saving method for maturing and drying.
- ❑ Reduction personnel costs is achieved by automatic operation via AGV and automatic loading / unloading.

ABSOLUTE CONSISTENCY IN PROCESSES & PRODUCTS

2.

- ❑ Air flows can be adapted on an individual basis, guaranteeing a particularly high degree of product consistency. The tried and tested air change flap system achieves dynamic circulation of air around the product.
- ❑ Possibility of running continuous production for saving production time and controlling mould formation.

CAPTIVATING QUALITY

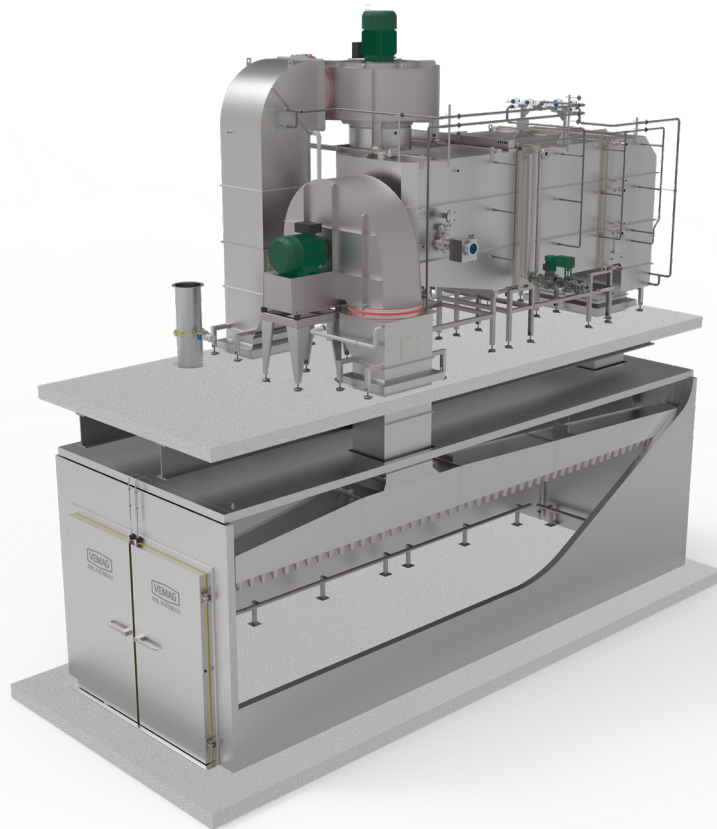
3.

- ❑ The thermal treatment of products is based on tried and tested CLIMAMAT STAR installation technology proved by more than 1.000 installations running worldwide.

CLIMAMAT^{POWER}

High-speed maturing installation for snacks

CLIMAMAT^{POWER} is based on the proven CLIMAMAT, our climatic maturing installation, and is equipped with a high-speed air performance for a consistent reddening, fermenting, drying, smoking and cooling of hanging as well as lying small-caliber products, i.e. snacks with drying rates from 10% - 80%/24h. The innovative systems can be individually customized.



THE CHALLENGE

Economical production of small-caliber products

A significant reduction of operational costs coupled with perfect product quality in the production of both hanging and lying small-caliber products is a challenge for any modern production plant.

The innovative CLIMAMAT^{POWER} is equipped with proven automatic fresh air and air circulation systems. These optimize room humidity as well as the air flow and thus improve product quality.

A measuring device controls the drying potential of the fresh air and cooling is only switched on when necessary. Valuable cooling energy is saved. Thus an outstanding reduction in operational costs is guaranteed.

With its considerably increased air capacity, the CLIMAMAT^{POWER} is the perfect economical solution for extremely fast and consistent drying snack products even at low temperatures.

BENEFITS

- Up to 80% drying per day
- 8 times air performance compared to conventional CLIMAMAT
- Individual adjustment options for machine output and air volume as well as flow conditions in the channels



BENEFITS

1.

TOP ENERGY EFFICIENCY & COST EFFECTIVENESS
2.

ABSOLUTE CONSISTENCY IN PROCESSES & PRODUCTS
3.

HIGH LEVEL OF FLEXIBILITY
4.

OUTSTANDING HYGIENE

FLOW CONDITIONS



Fig.1 Air distribution with hose system - CLIMAMAT TEXTILE



Fig.2 Air distribution with horizontal system - CLIMAMAT ALPAS

In order to be able to guarantee the consistency of your products, the air flow conditions inside the chamber are of key importance.

Using the hose system results primarily in an economic benefit compared to the horizontal system (stainless steel), but also provides a hygiene advantage.

Whilst the hose system is suitable for especially wide chambers or those with additional structures inside, we recommend the horizontal system for tall chambers with a heavy loading and products with significant water activity and thus a high drying requirement.

The tried and tested air change flap system ensures a consistent flow of air, achieving virtually identical drying rates within each individual trolley and throughout the chamber.

To learn more about the CLIMAMAT^{TEXTILE}, scan the QR Code on the left, for CLIMAMAT^{ALPAS} the right one:



VARIANTS

CLIMAMAT COOL STORAGE ROOM

Our extensive product range for our industrial customers also includes cooling and storage chambers for baked goods.
The CLIMAMAT COOL STORAGE ROOM allows you to cool loaves of bread under controlled conditions immediately after the baking process, with minimal weight loss and reduced loss on cutting.



OPTIONS



SMOKE GENERATOR
We supply glowing smoke generators for additional smoking processes in the horizontal system.



CENTRAL MANAGING AND DOCUMENTATION SYSTEM (MICROMAT ANALYZER)
This system reduces complex production processes and a wide-ranging distribution of installation components to a reliable and convenient general overview for the operator.



ETHERNET CONNECTION
Messages are e-mailed to a defined e-mail distribution list.



MANUAL FOAM CLEANING
A manual foam cleaning facility is available for cleaning the machine; this is also available with a pump as an option.



AIR DISTRIBUTION
Depending on the product and on boundary conditions, we supply either textile hoses with rows of holes or a duct system with horizontal air distribution to distribute air in the chamber; air is distributed throughout the chamber by the air change flap system.



TECHNICAL DATA

CLIMAMAT STORAGE ROOM

CLIMAMAT STORAGE ROOMS are climatic storage and post-maturing chambers individually tailored to customer requirements. We supply 2 different air distribution solutions in the chamber, adapted to suit the product and chamber dimensions in question: the hose and the horizontal system. We furthermore adapt the installation to suit your building or plan your new construction in collaboration with you. 🌐

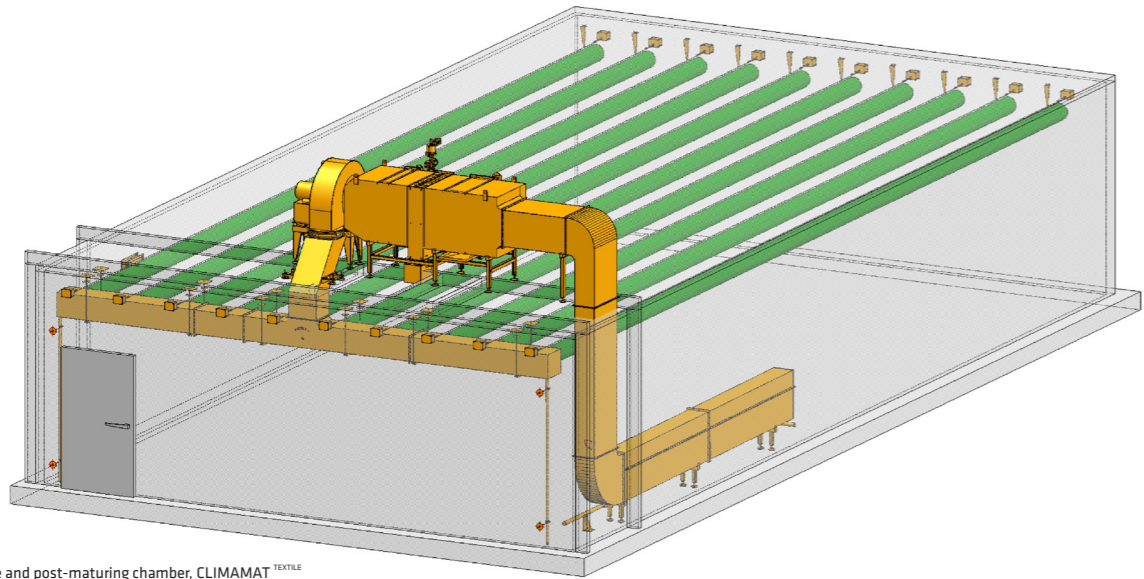


Fig. 1 Climatic storage and post-maturing chamber, CLIMAMAT^{TEXTILE}

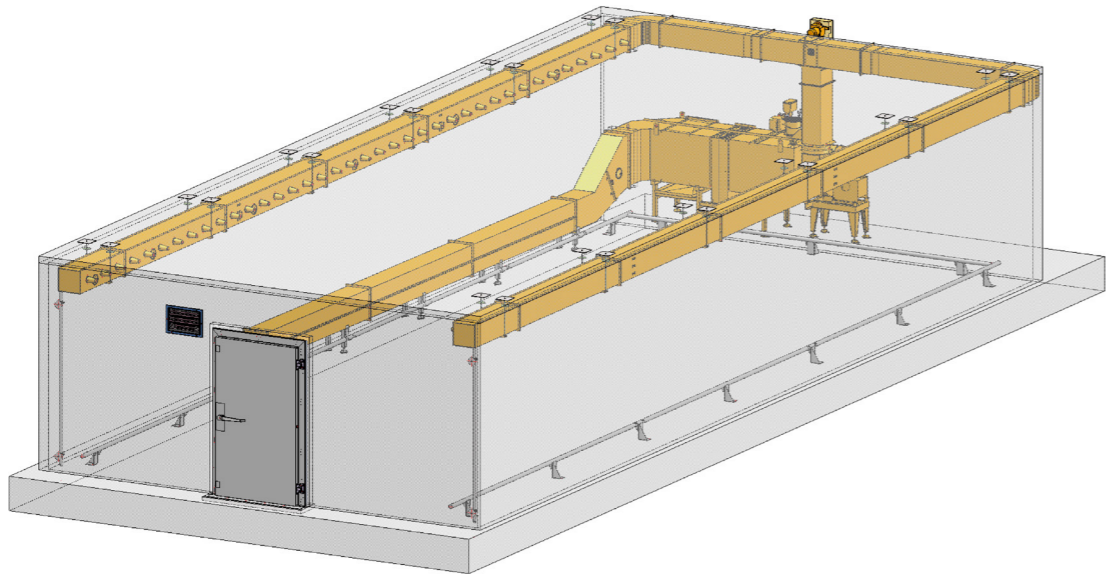
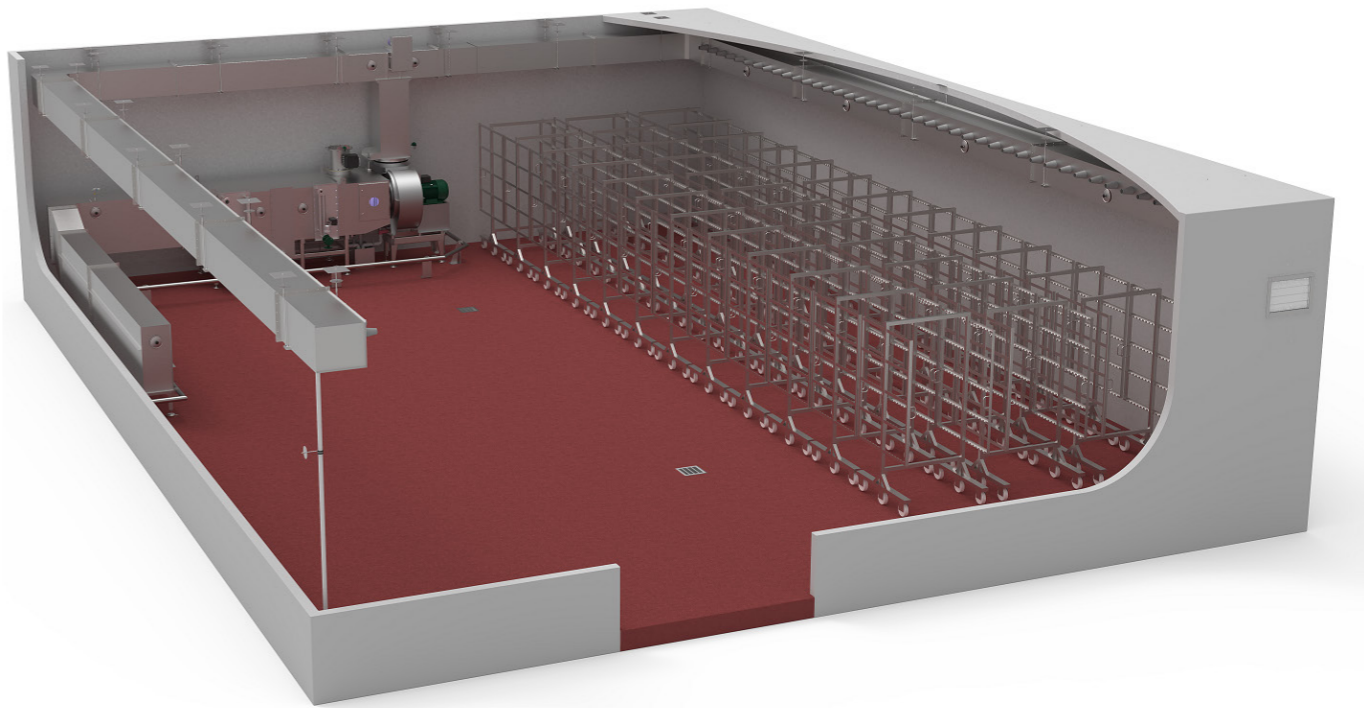


Fig. 2 Climatic storage and post-maturing chamber, CLIMAMAT^{ALPES}



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