

# MODERN TECHNOLOGY UNIQUE TASTE

Smoking and cooking chambers

Catalogue





## OUR PROMISE: LATEST TECHNOLOGIES, IMPECCABLE SERVICE

At Emerson Technik we use the newest technologies to help you offer your customers the traditional taste they are looking for. Our products are the results of years of research and development, dedicated to creating better ways to please even the most exquisite tastes.

We provide a wide range of products for meat processing suited for both large industrial factories as well as small-medium size plants.

'We use state of the art products and latest technologies, but we also concentrate on engendering the innovation in everything that we do'.



# Innovation and Dedicated Teams

## Putting innovation at the core of what we do

Meeting both the needs of the market and the needs of your consumers is one of our main guiding principles. That is why we do not only use state of the art products and latest technologies, but we also concentrate on building innovation in everything that we do. We are always looking for innovative solutions to respond to most requirements of our customers whether they are small-medium sized plants or large industrial factories.

Working for so many years in the industry has enabled us to acquire a detailed understanding of your needs. We have gathered insights from our customers that have helped us develop our product and create innovative solutions for your business.

## Working with dedicated people

Working to keep up with consumers' most exquisite tastes and businesses' specific requirements means working around the clock with professionals who understand the importance of each small detail. At Emerson Technik, we take great pride in our team of highly specialized and trained people who are always ready to solve any challenges they might face.



## Offering support every step of the way

Whether we are talking about our researchers, our mechanics or our intervention team, Emerson Technik's employees are hardworking and dedicated people who focus on offering you the best solutions and support for your business needs. No matter the challenge, we can always find the specialist to come up with the right solution for smoking and cooking your products. In addition, our team can offer you support every step of the way, including learning how to manage your installations.



## Cooking Chambers

### New technologies for better results

The Emerson Technik smoking and cooking units are allowing automatic heat treatments for meat, fish or other food products. They benefit from very strong materials and from a special cooking system – QuickCook, which ensures reduced working time as well as overall better results. The weight loss is strongly improved leading to a better yield, but at the same time the product is uniformly cooked, as the chambers come with one fan for each trolley. Each cooking chamber is equipped with gas, LPG, diesel, oil or electric heating (besides the steam), thus ensuring the generous steam production inside the chamber. Also, the chambers feature a modular construction from high quality stainless steel and mineral rock wool panels, which allow them to be installed in different locations, from small to mid-sized to high capacity factories.



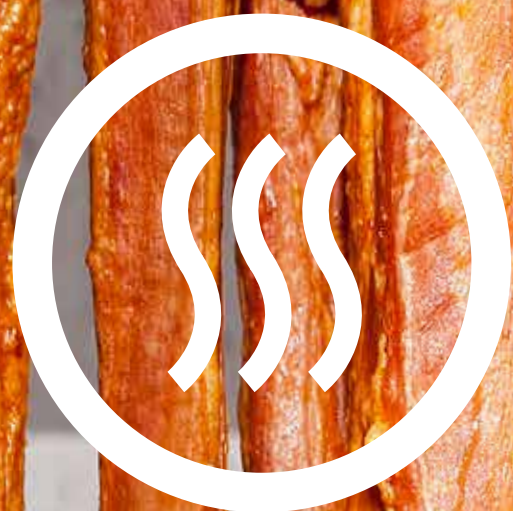
**COOKING**



### FEATURES

Different cooking control options are available, such as Delta T cooking, chamber temperature cooking or core temperature cooking. The chambers are controlled either via the EasyTouch touch screen computer or with the ViSoft PC monitoring software.





**COOKING - SMOKING**



## Smoking Chambers

### Fully equipped for excellent products

The Emerson Technik smoking and cooking units are allowing automatic heat treatments for meat, fish or other food products. In order to guarantee the uniformity of the products, our chambers use one fan for each trolley and one extra evacuation ventilator. The perfect coordination of the sizes and parameters results in shorter programs and improved yields, thanks to the reduced loss. Our customers can choose from saw-dust, wood chips or liquid smoke generators depending on their facilities and the desired products. The modular construction from high quality stainless steel and mineral rock wool panels allows our chamber to be installed in different locations, from small to mid-sized to high capacity factories.

All the Emerson Technik smoking and cooking chambers are coming standard with an automatic cleaning system, cleaning agent dosing and with water pressure pump (optional). The chambers are controlled either via the EasyTouch touch screen computer or with the ViSoft PC monitoring software. Extra optional benefits include showering, cold smoke option, horizontal air flow, automatic door opening, extra rear door/s or catalytic afterburner.



## Mixing Chambers

### Perfect for industrial production

The mixing chambers are designed for the industrial production and can have a capacity of two/four up to twelve trolleys. Our customers can choose from saw-dust, wood chips or liquid smoke generators, depending on their facilities and the desired products. All the Emerson Technik smoking and cooking mixing chambers are coming standard with an automatic cleaning system, cleaning agent dosing and also an optional water pressure pump.

Also optional are the chambers' showering, cold smoke, horizontal air flow, automatic door opening, extra rear door/s or the catalytic afterburner.



**MIXING**





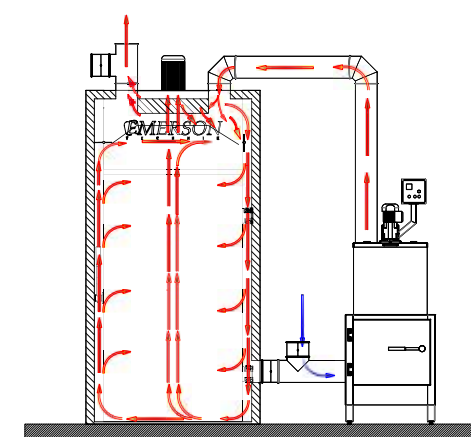
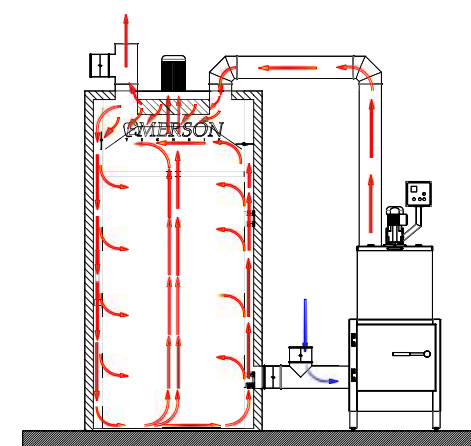
## Fish Smoking Chambers

Our customers can choose from saw-dust, wood chips, friction or liquid smoke generators depending on their facilities and the desired products. The air flow can be vertical or horizontal for fish laying on nets. The heating can be either steam, gas, LPG, diesel, oil or electric, each system ensuring the reach of the desired parameters in optimal time.

### BENEFITS:

- Reliability due to strong materials and processes
- Weight loss reduced to minimum
- Less energy consumption due to innovative airflow design
- Fast programs thanks to the design of the ventilating system
- Uniform products
- Complete control over the processes due to touch-screens

### Horizontal Air Flow



### Additional features

We provide our customers with additional features such as: chambers' showering, cold smoke, horizontal air flow, automatic door opening, extra rear door/s or catalytic afterburner.



# FISH SMOKING





## CHEESE SMOKING

## Cheese Drying and Smoking Chambers



### BENEFITS:

- Reliability due to strong materials and processes
- Weight loss reduced to minimum
- Fast programs thanks to the design of the ventilating system
- Easy installation due to the modular construction
- Complete control over the processes due to touch-screens

For smoked cheese application, Emerson Technik smoking chambers usually use the cold smoke system. The perfect air circulation, together with the low smoke temperature (controlled by the cooling register) ensure that the product will have less loss after the drying – smoking process and also a perfect maturation.

The chamber is designed to have optional horizontal air circulation for laying products on the grates. Thanks to the horizontal air circulation, the trolleys can be constructed with many levels and the capacity will be increased. Also, the heating can be adjusted for maturation and humidity control.

Our customers are welcome to choose from saw-dust, wood chips, friction or liquid smoke generators.



## Baking Units

### Strong built and reliable

The baking units allow for automatic treatments like baking, roasting and cooking up to 200°C for meat, sausages and other products. The products can be hanged on trolleys or arranged on grates, thus increasing the loading capacity. For the best results during each process, we have developed our chamber using very strong materials and special upgraded insulation and reinforced panels with 100 mm thickness. In order to guarantee the uniformity of the products, our chambers use one fan for each trolley and one extra evacuation ventilator. The perfect coordination of the sizes and parameters results in shorter programs and improved yields thanks to the reduced loss.

### Additional features

All Emerson Technik baking and roasting chambers are coming standard with an automatic cleaning system, cleaning agent dosing and also a water pressure pump (optional). The chambers are controlled either via the EasyTouch touch screen computer or with the ViSoft PC monitoring software (optional). Upon the customer's demand, the baking chamber can be equipped with a glass door for better view and control of the baked products.



### BENEFITS:

- Reliability due to strong materials and processes
- Weight loss reduced to minimum
- Increased efficiency due to bigger loading capacity
- Complete control over the processes due to touch-screens and glass doors (optional)



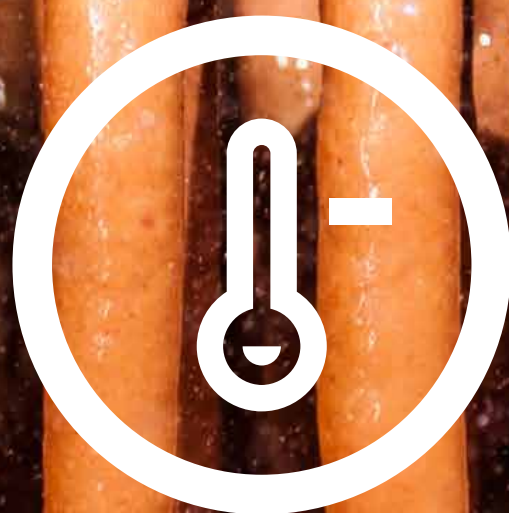


## Intensive Cooling Technology

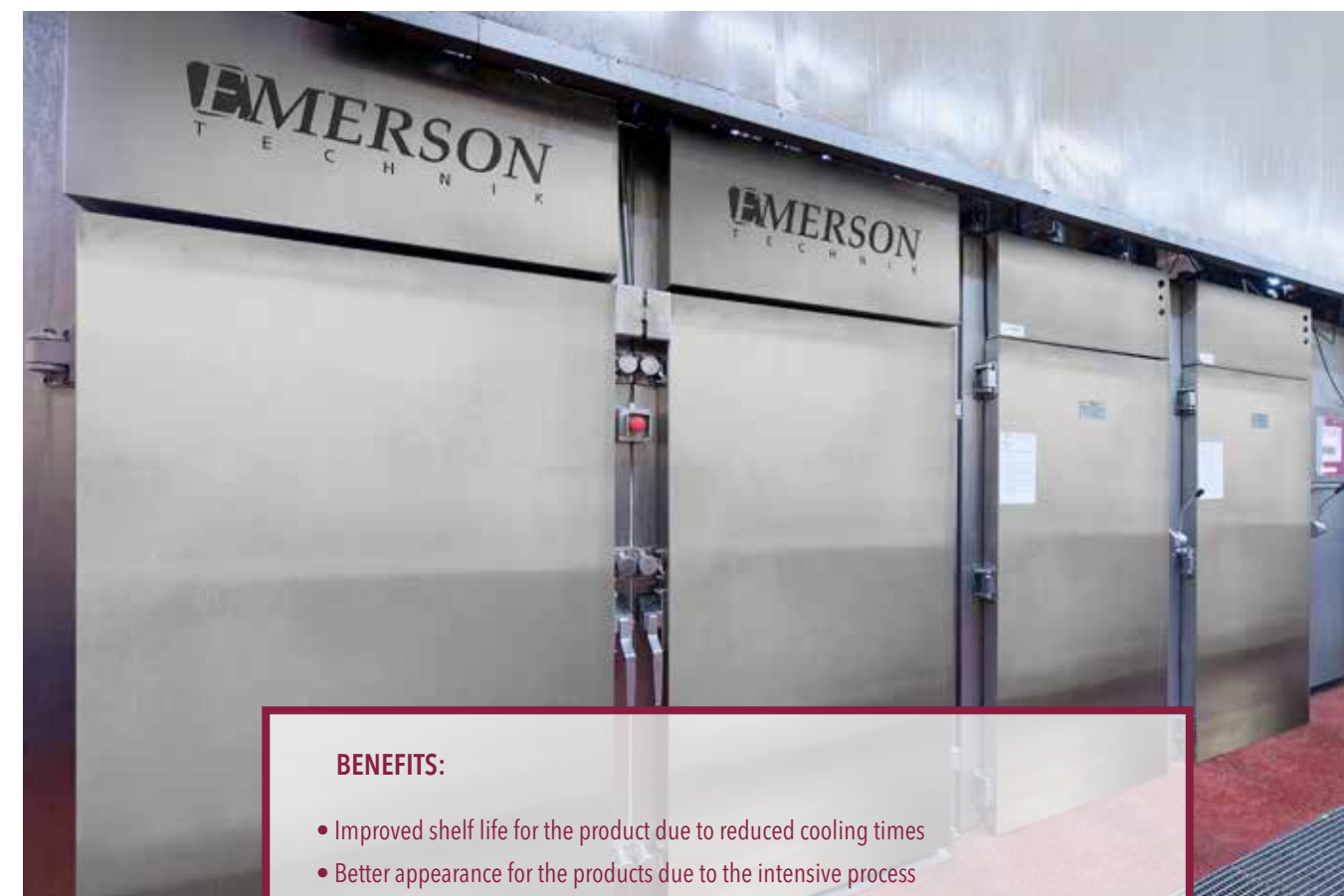
### Complete process for chilling various products

The cooling chambers are designed for fast chilling of various products.

The cooling system functions within 2 stages, namely the pre-cooling water showering stage and the fast cooling with high humidity intensive fog stage. Thanks to the reduced cooling times in the temperature range (from 40°C to 15°C), the products' shelf life is dramatically improved and the appearance is enhanced. The final core temperature of the product allows for immediate packing or slicing, therefore reducing the handling and storing costs. For increased flexibility, with optional extra heating, the chamber can also be used as a cooking chamber. Compared to conventional cooling, the weight loss is also improved. The chambers are controlled via the EasyTouch touch screen computer or with the ViSoft PC monitoring software (optional).



### INTENSIVE COOLING



#### BENEFITS:

- Improved shelf life for the product due to reduced cooling times
- Better appearance for the products due to the intensive process
- Reduced handling and storing costs due to the ability to immediately pack the products
- Flexibility (the chambers can also be used as a cooking chamber)
- Perfect control with EasyTouch and ViSoft PC monitor



## Defrosting Technology

### Quicker, safer, better

The defrosting technology is designed for fast, safe and controlled thawing of the frozen meat, fish or other products blocks. The process uses gentle air circulation, humidity and temperature control, to give the customer the possibility to determine the time/loss balance. The difference between the core temperature and the surface temperature can be adjusted.

The EasyTouch control system offers the possibility of automatic steps with interval waiting times. The system ensures low investment and flexible capacity comparing to traditional thawing systems. The chambers can be constructed welded, thus offering also mobility. The chambers are controlled via the EasyTouch touch screen computer or with the ViSoft PC monitoring software (optional).



**DEFROSTING**





# SMOKING GENERATORS

## Designed to meet your specific needs

The Emerson Technik smoking chambers can be equipped with various OptiSmoke smoking generators, depending on the customer's request or specific local regulations all over the world. Made from solid stainless steel material and resistant at high temperature OptiSmoke can be used both for hot smoke as well as for cold smoke, given the different type of products. Depending on the application and the capacity of the chamber, we provide the right OptiSmoke smoke generator. It can be ordered for sawdust, wood-chips, friction or liquid smoke. All types of smoke generators are automatic controlled by the main EasyTouch system. Special design ash separator provides a clean smoke into the chamber and a natural smoke flavor. In case of sawdust and wood-chips smoke generator, the burning is done by electrical resistance.

OptiSmoke is working with an automatic humidification system and also with automatic "firefighter". Our smoking system is designed to work on the same unit, both with the closed system as well as with the open one. The closed system is working with the recirculation of the smoke and evacuation at the end of the process. The open system is working with continuous exhaust of the smoke and is recommended for different and specific type of products. The automatic cleaning for the smoke generators is controlled by EasyTouch. The smoke generator can be placed next to the chamber, on the left side, on the right side or in the back side. Upon special request, our engineers can design customized, different positions for the smoke generator.



**SAWDUST SMOKE GENERATOR - OptiSmoke**

- Models: GR 12, GR 24, GR 58 depending on smoking chamber capacity
- Sawdust 1-3 mm or 3-8 mm
- Automatic humidification system
- Smoke temperature controller inside the smoke generator
- Firefighter incorporated
- Position: left, right, back of the chamber within a requested distance
- At choice: the position for the hinges and handle

**FRICTION SMOKE GENERATOR**

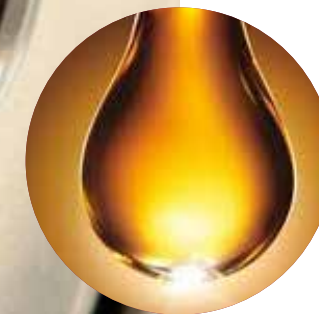
- For mild flavor of the smoke
- The smoke intensity can be regulated
- Position: left, right, back of the chamber within a requested distance
- At choice: the position for the hinges and handle

**WOOD-CHIPS SMOKE GENERATOR**

- Wood – chips 8-13 mm
- Automatic humidification system
- Smoke temperature controller thanks to the temperature sensor
- Firefighter incorporated
- Position: left, right, back of the chamber with a requested distance
- At choice: the position for the hinges and handle

**LIQUID SMOKE GENERATOR**

- Various models, for operating 1 or 2 smoking chambers
- The atomization of the liquid smoke
- No smoke emission
- Variety of smoke flavors





Features and Highlights



1

STRONG CONSTRUCTION

Thick stainless steel sheets used in all panels, reinforced and high density mineral rock wool.

2

EMERGENCY OPENING

Emergency opening to prevent accidental locking inside of the operators



3

PIPING

Strong pipes and connections to prevent heat and smoke loss



4



AUTOMATIC CLEANING SYSTEM

The cleaning system is operated from the EasyTouch touch screen computer and comes standard with cleaning agent dosing system and also with constant pressure water pump (optional)

5

VENTILATORS

Strong ventilators over each trolley for optimum air flow circulation.



6

HINGES

Robust and adjustable lifting door hinges for perfect sealing.



7

AUTOMATIC DOOR OPENING

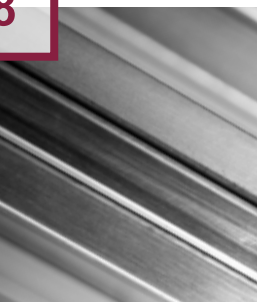
Optionally, the door can be automatically opened at the end of the process or before showering.



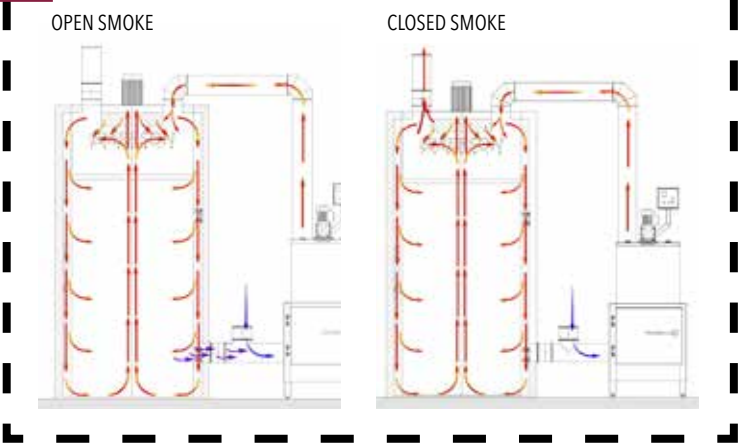
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FLOOR

The floor comes standard with 20 mm thick isolation and reinforced for heavy traffic. All the floors are anti-slippery, starting with the two trolley capacity.



9



"OPEN" AND "CLOSED" SMOKING

Both systems are available as standard giving the possibility of choosing the optimal smoke circulation depending on the final product.



# Touch Screen Control

## More Control

All the parameters and programs can be controlled via a 15" state of the art touch screen computer, with special integrated software that allows visualizing and storing all the information as well as PC and Ethernet connection.

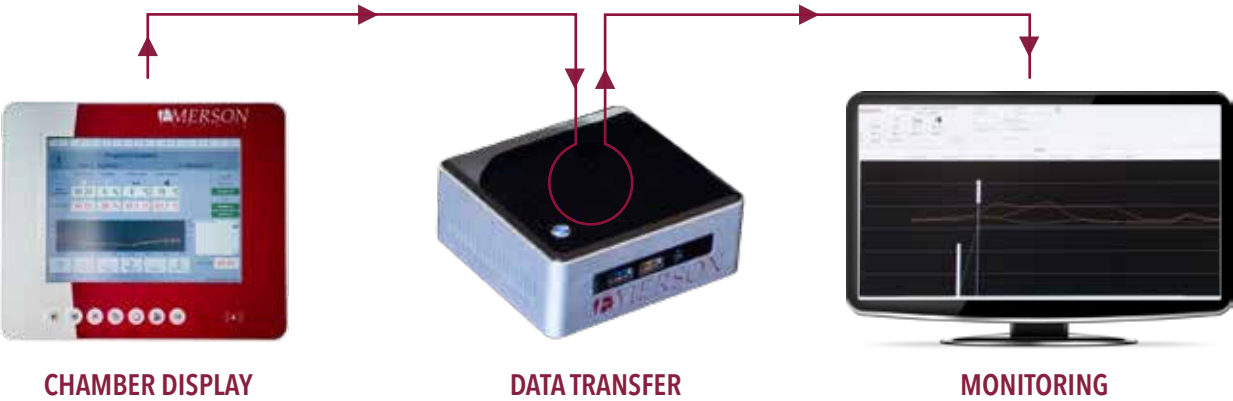
## Easy To Monitor

- Allows control of up to nine Emerson Technik units with one touch screen
- Comes as standard with over 40 different operating languages
- Stores information for up to 30 days
- Data can be collected via USB stick or SD card
- Electronic keys – transponders – for different access levels for the operators, production managers, technicians and administrator.



# How it works

ViSoft is our own developed software for monitoring and controlling the units from a distance. The software comes preinstalled on an industrial state of the art PC and allows the connection of an unlimited number of chambers. The software allows storing or further processing the information regarding production, process and different parameters according to the customer's and legislation requirements.



# Our Customers' Opinion



**Brazil, Cardeal Ind e Com de Alimentos Ltda**  
**Paulo Matavelli**

”

“It is easy to operate - program and performs accurate results. Emerson Technik has an excellent after sales service with a helpful and kind support group 24 hours per day. I am well pleased with the goods results. Fulfilled a promise!”



**Romania, Cris-Tim**  
**Radu Timiș**

”

“The Emerson Technik smoking chambers have a very good drying which gives a beautiful color to the final product and a minimum loss on the thermal treatment programs. Great quality and reliability. Great value for money!”



**Turkey, GÜMÜŞDOĞA SU ÜRÜNLERİ İHRACAT ve İTHALATA.Ş**  
**Ing. Ibrahim Turhan**

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“We chose the Emerson Technik chambers because of their approach to our special job and also their sincerity. They have good experience on their business and we reach the target on our process. So, we are happy to use their product. They are perfect! We are satisfied because they know what they are doing.”



**Spain, Preparados Carnicos Martin SL**  
**Martin Mezin**

”

“We have started with one chamber and continued and purchased another one, and another one because we were very satisfied with the performance of the machine comparing to our existing equipment from Germany. The quality of the final product is very good and the reduced working time results in a minimal loss.”



**Mexico, Palsgaard Industri de Mexico**  
**Ing. Frank Klappert**

”

“The service from Emerson has been fitting do to its high level of response to inquiries that we have posed, as well as the detailed attention when installing the equipment. In conclusion this equipment facilitates to optimize production of meat products that every company in this sector should have.”



**Croatia, PPK karlovačka mesna industrija d.d**  
**Igor Miljak**

”

“Looking for new smoking/cooking chambers we where introduced with a range of products of Emerson Technik. Good quality to price ratio has influenced our decision to accept them as a new supplier. Their equipment has proven to be effective and reliable, and has met all our expectations.

On the basis of existing cooperation we can say how Emerson Technik has become a reliable partner with whom we can count in the future.”



Characteristics

Size	UM	1 trolley	2 trolley	3 trolley	4 trolley 2x2
Chamber base	cm	143 x129	143 x234	143 x339	273 x234
Chamber height (electrical)	cm	259	259	259	259
Chamber height (steam)	cm	259	259	259	259
Chamber height (gas)	cm	284	284	284	284
Room height required (electrical)	cm	359	359	359	394
Room height required (steam)	cm	359	359	359	394
Room height required (gas)	cm	384	384	384	419
Trolley size (WxDxH )	cm	100x100x200	100x100x200	100x100x200	100x100x200 *
Trolley stick length	cm	100	100	100	100
Heating capacity					
Electrical heating	KW	36	72	108	144
Steam heating	KW	40	80	120	160
Gas heating	KW	40	80	120	160
Smoking generator					
Model		GR12	GR24	GR24	GR24
External dimensions (WxDxH)	cm	54x60x259	74x80x203	73x80x190	73x80x190
Power consumption	KW	1.6	2.3	2.3	2.3
Sawdust size	mm	0-3	0-3	0-3	0-3 **
Power consumption without heating	KW	7.7	10.4	13.1	15.8
Low pressure steam consumption	kg/h	40	80	120	160
High pressure steam consumption	kg/h	50	100	150	200
Cooling capacity					
For cold smoke - 5°C	KW	5	10	15	20
For intensive cooling -10°C	KW	18	36	54	72

\* other dimensions on request  
\*\* 3-8 mm on request

Size	UM	4 trolley	6 trolley 2x3	6 trolley tunnel	8 trolley 2x4
Chamber base	cm	143x443	273x339	143x652	273x443
Chamber height (electrical)	cm	259	259	259	259
Chamber height (steam)	cm	259	259	259	259
Chamber height (gas)	cm	284	284	284	284
Room height required (electrical)	cm	359	394	359	394
Room height required (steam)	cm	359	394	359	394
Room height required (gas)	cm	384	419	384	419
Trolley size (WxDxH )	cm	100x100x200	100x100x200	100x100x200	100x100x200 *
Trolley stick length	cm	100	100	100	100
Heating capacity					
Electrical heating	KW	144	216	216	288
Steam heating	KW	160	240	240	320
Gas heating	KW	160	240	240	320
Smoking generator					
Model		GR24	GR58	GR58	GR58
External dimensions (WxDxH)	cm	73x80x190	95x101x219	95x101x219	95x101x219
Power consumption	KW	2.3	3.5	3.5	3.5
Sawdust size	mm	0-3	0-3	0-3	0-3 **
Power consumption without heating	KW	15.8	22.4	22.4	27.8
Low pressure steam consumption	kg/h	160	240	240	320
High pressure steam consumption	kg/h	200	300	300	400
Cooling capacity					
For cold smoke - 5°C	KW	20	30	30	40
For intensive cooling -10°C	KW	72	108	108	144

\* other dimensions on request  
\*\* 3-8 mm on request



