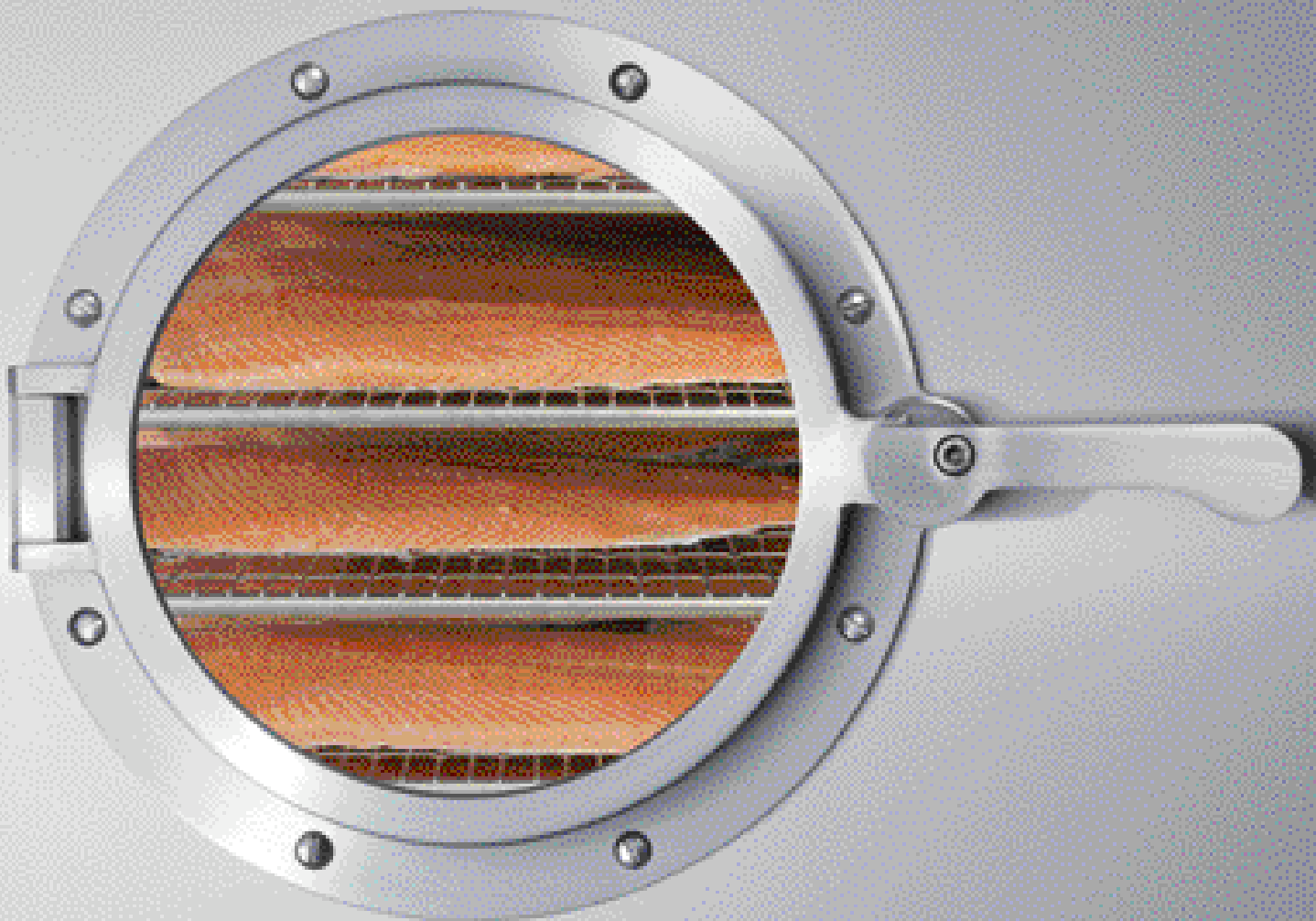


BASTRA technology for the smoking of fish products



MADE IN GERMANY



Smoking is one of the oldest arts in the preparation of fish.

It reaches back into the Middle Ages and thus has a long tradition.

Only the master smoker knows the secrets concerning recipes and ingredients.



Hardly any speciality is as much in demand as fine smoked products, hardly any delicatessen article is experiencing such spectacular growth rates as smoked fish.

Growing markets, changing purchasing habits and environmental conditions are confronting today's smoking with new challenges.

BASTRA smoking technology stands for the fine art of refining fish. You will be convinced by the results: finest smoked fish, delicate and noble in

quality. Naturally smoked. A taste that will enthuse your customers.

Quality conscious.

Economic.

Environmentally friendly.

Cold smoked products, such as salmon, salmon herring as well as hot smoked products such as mackerel, various mackerel filet specialities with pepper, onion or paprika base, smoked

herring, smoked rock salmon, trout, smoked eel, black halibut, rosefish, catfish etc, can be produced in BASTRA smokers.

With its product lines CLASSIC LINE for the craftsman's trade as well as INDUSTRIAL LINE for industry, BASTRA offers the perfectly tailored device for all sizes of company and all requirement profiles from the economic single-trolley chamber through to the high-capacity multi-trolley chambers.





BASTRA smoking technology

BASTRA cooking and smoking technology in harmony with the environment. Economic, environmentally friendly, energy saving and future oriented.

The BASTRAMAT offers almost unlimited application possibilities in terms of modern cooking, smoking, refrigerating and heat technology.

The advantages of BASTRA technology are based on know-how concerning the correct dosing of temperature, humidity, smoke density and air flows as well as its implementation through corresponding control technology

More than 60,000 systems worldwide

The basis for the state of the art technology is formed by the permanent inflow of knowledge and experience into the further development of our devices – knowledge and experience which we obtain from our practical dealings with the most varied applications.

BASTRAMAT liquid smoke chamber with special equipment glass door and inner lighting



Consequently, you will find BASTRA all over the world in the refining of fish and poultry products as well as in the production of meat and sausage products.

More than 60,000 cooking and smoking devices alone, installed all over the world, demonstrate our expertise and acceptance on the market.

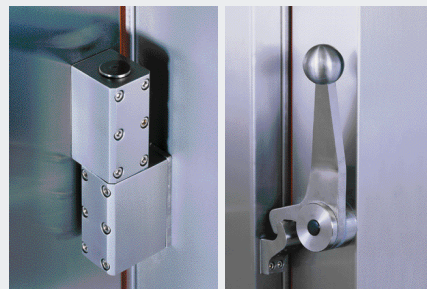
Environmentally friendly and innovative technology

Our maxim is environmentally friendly technology with simultaneous maximum economic efficiency and quality. This applies both for our classic possibilities in smoke generation through smouldering and friction smoke generators as well as for our successful BASTRA liquid smoke system.

Whether you smoke the finest salmon cold and the popular “Stremel” salmon hot, smoke trout or mackerel, the decisive factor is the quality achieved because your customers want appetising freshness and a natural smoke aroma.

As a result, we have not only made sensible use of innovative technology but we have further developed it in an industry and customer-oriented manner with all of our energy and know-how. Numerous patents and utility models for our developments are evidence of our innovation potential.

Hinges and locks from high-quality stainless steel



Standard features

- Chamber in self-supporting construction from high-quality stainless steel.
- Fully automatic, electrically-motors operation of the smoke and air flaps
- Precise, electronic regulation of chamber and core temperature
- Psychrometric humidity regulation and automatic fresh air system
- Compressed air humidification for optimum humidity saturation for connection to a compressor - provided by the customer
- Automatic compressed-air foam cleaning
- **Multi-level air circulation** thanks to specially designed high-performance ventilator wheels and even transfer of the smoke through optimised blow-out nozzles. The dimensioning of the ventilator wheels ensures even and powerful air circulation inside the chamber at low revolutions.
- Complete pipe connection of the supplementary and auxiliary devices such as **cleaning and humidification using special steel corrugated pipes**. Maintenance-friendly assembly of the valves on the distribution systems.
- **Inner area** of single and double-trolley chambers in **vapour-tight welded version**, fully insulated all round. This insulation makes a major contribution to reducing the consumption of heating energy.
- The chambers are **ground movable** and thus easy to load.
- Double-walled door with silicone profile seal and closing elements from stainless steel.

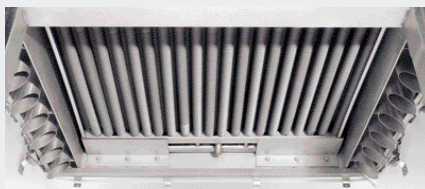
Optional equipment

- **Cooling facility**, ideal for cold smoking and maturing processes. A refrigerating machine is required by the customer. The purposeful interaction of heating, exact temperature regulation and guidance of circulating air enables you to carry out all smoking processes irrespective of the ambient temperature.
- For pure climatic smoking processes, as drying and cold smoking under full load, e.g. salmon, we also offer a **reinforced cooling device** with maximum dehumidification capacity. Recommendable for the industrial processing of cold smoked products. In this way, prescribed low temperatures can be adhered to. A refrigerating machine is required by the customer.
- 3-stage air circulation
- **Horizontal alternating circulating air** - especially for lying products prepared on grates such as sides of salmon etc. With this circulating air system, there is a significant increase in the number of levels of the trolleys and thus in the production capacity.

Cooling facility



Reinforced cooling facility

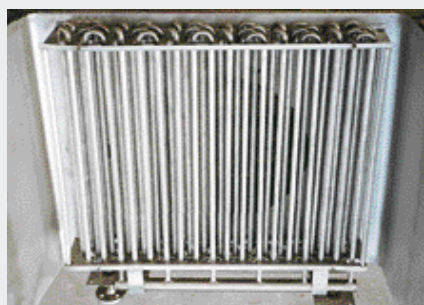


- Catalytic waste air cleaner
- Control unit and smoke generator in a built-on pillar
- Automatic sawdust humidifying device built into the smoke generator
- Automatic door opening via compressed air cylinder
- Doors on front and rear

Forms of heating

- Model 850/851: electric heating
- Model 1200/1201/1500/1501: electric, gas, oil or LP steam heating
- Model 2000/2001 and multi-trolley chambers as from model 4000/4001: electric, gas, oil, LP and HP steam heating
- BASTRAMAT devices with HP steam heating are equipped with robust steam registers which distinguish themselves through a very large heat exchanger surface

Steam register



High-tech microprocessors

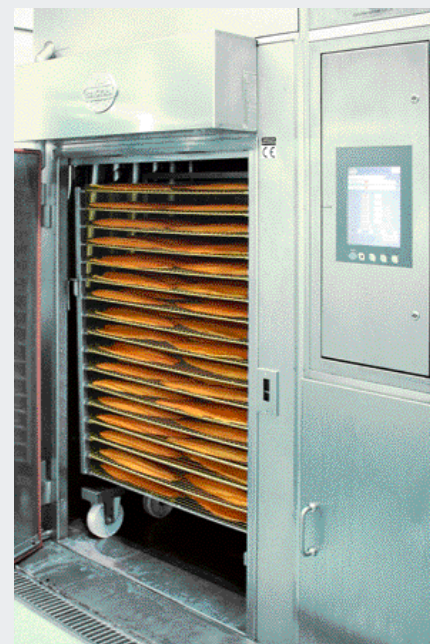
These latest-generation program regulators, especially developed for BASTRA, impress through their user friendly handling and maximum flexibility.

The digital technology guarantees maximum precision and exact adherence to prescribed values. Up to 99 different programs can be prepared and stored.

The automatic program start, made possible by pre-selected time, and the option of documentation as per HACCP using the required BASTRA VIEW & CONTROL software ensure "round the clock operation".

Details on control systems can be seen from our prospectus **BASTRA Control Technologies**

BASTRAMAT liquid smoke chamber with TS 800 modern touch screen control



Smoke generation



TF smoking technology Smouldering smoke/woodchip

Wood chip smoke generator in the door or adjacent with multi-trolley chambers. Fresh air is fed to the smouldering zone so that the valuable natural smoke aroma is retained.

The smoke is sucked in by the BASTRAMAT chamber and fed to the goods to be smoked via the air circulation system. The quantity of fresh air purposefully fed to the smoke generator leaves the chamber via a throttled waste air flap as minor residual smoke.

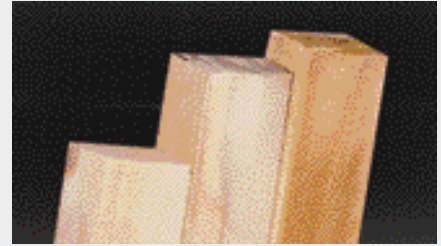


UF smoking technology Smouldering smoke/sawdust

Sawdust smoke generation by means of smouldering smoke generator that is adjacent or built into the door.

A partial flow of the smoke-air mixture is taken from the chamber and again fed to the smoke generator with the addition of fresh air. The minor residual smoke leaves the chamber via a throttled waste air flap.

For you, both BASTRA UF and TF smoking technologies enable you to carry out your production using an exhaust-reduced, through-flow installation with circulation/fresh air operation. The requirements laid down by the relevant VDI 2595 guidelines for emission reduction are undercut by this smoking technology.



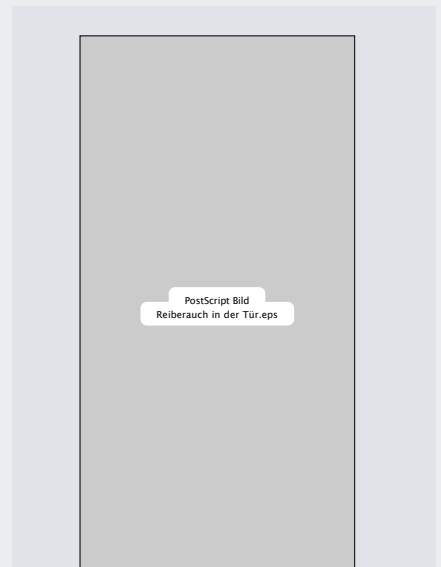
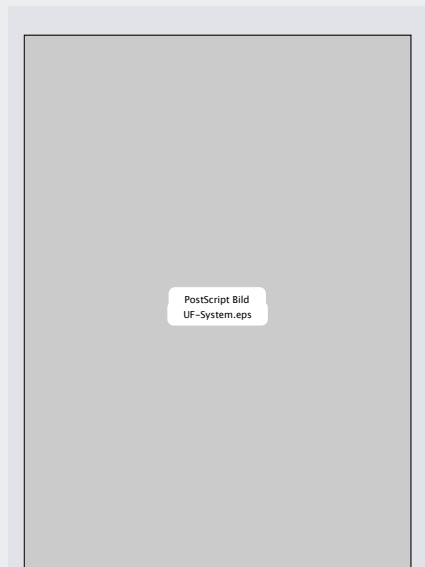
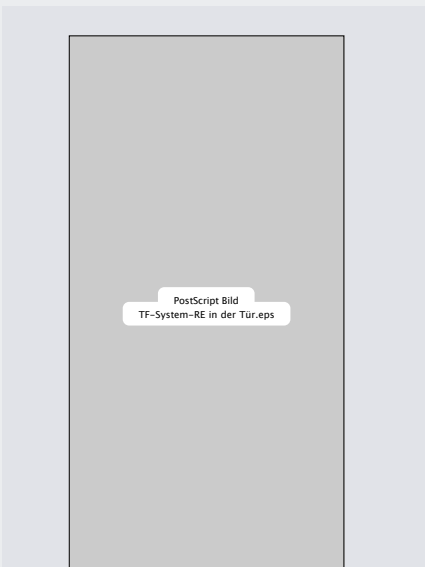
Friction smoke technology

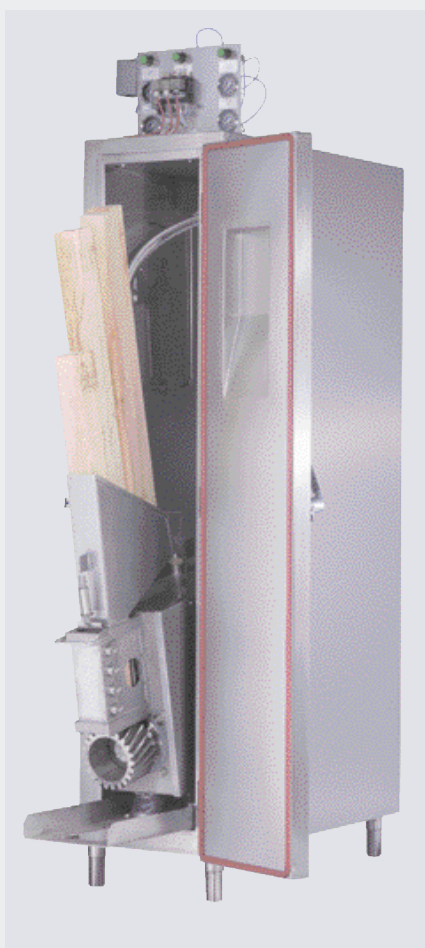
Friction smoke generator built into the door or adjacent friction smoke generator.

The chamber works as a closed system; as a result no emissions are created during the smoking phase.

Any residual smoke present is washed out following the smoking program by means of spraying water in the smoke generator.

A special friction wheel ensures short-term high smoke density with low noise generation. With integrated wood magazine for 4 beech woods. Other types of wood can also be used.



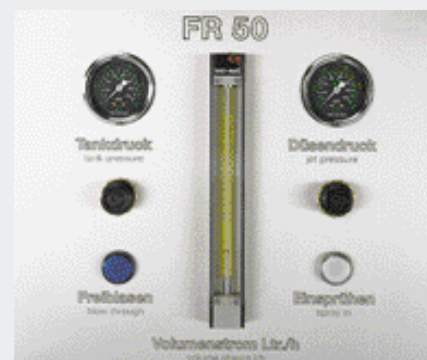


Liquid smoke technology

This proven and cost-effective smoking process distinguishes itself above all through the fact that the harmful substances contained in the smoke have already been filtered out during production of the liquid smoke.

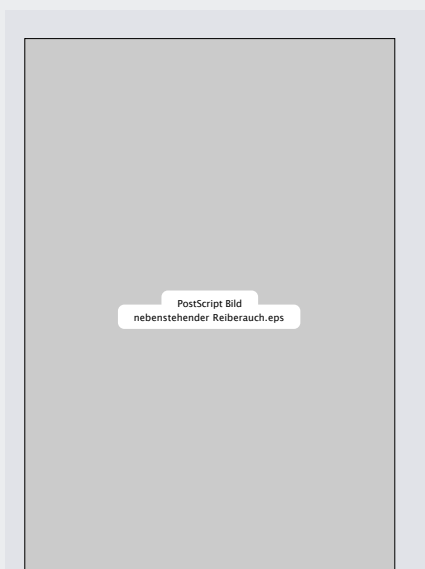
Liquid smoke chambers work as a closed system. As no emissions result during the smoking phase, they are regarded as particularly environmentally friendly.

This technology achieves best results through the optimised interaction of modern microprocessor control systems, humidity regulation, even circulating air as well as temperature and smoke density. The precise fine dosing produces a stable and dry smoke.

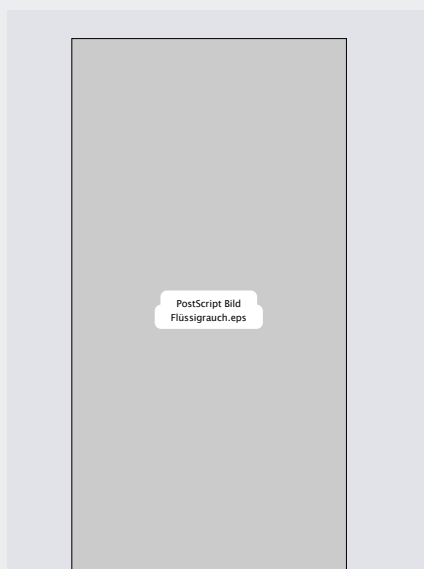


The advantages at a glance:

- Emission-free smoking without expensive approvals procedures
- No high-cost reheating
- No high-cost emissions measurement
- Reduction in waste water
- No disposal of tar residue and ash
- Improved hygiene and cleaner workplaces
- Safe workplaces without risk of fire or explosion
- Lower requirement in terms of storage space for smoking materials
- Maintenance-reduced smoking
- Constant results thanks to stable smoke colour and stable smoke aroma
- Increased productivity



PostScript Bild
nebenstehender Reiberauch.eps



PostScript Bild
Flüssigrauch.eps



MADE IN GERMANY

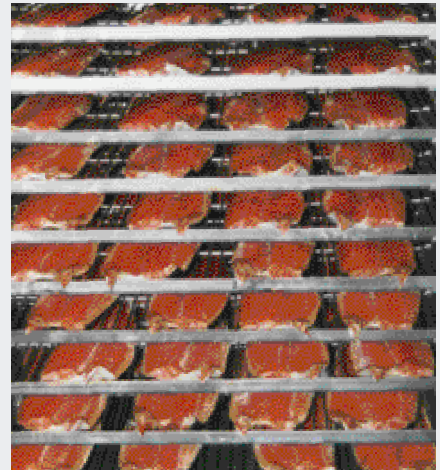
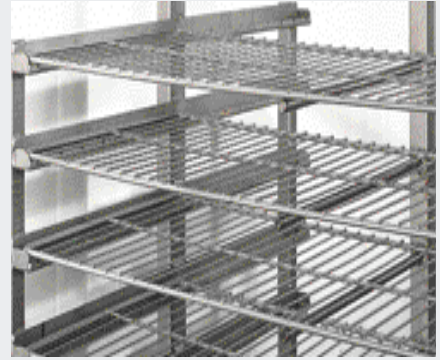
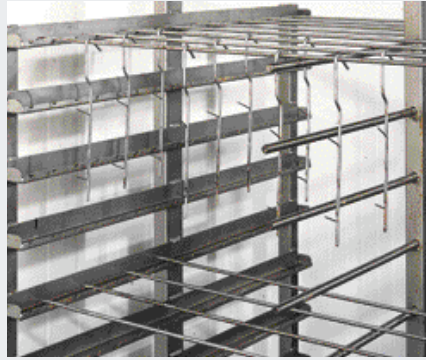
Bayha & Strackbein GmbH

P.O.Box 1260 · D-59702 Arnsberg · Germany
 Kleinbahnstraße 12-16 · D-59759 Arnsberg
 Phone: +49(0)2932-4810 · Fax: +49(0)2932-48139
 Internet: www.bastra.de · E-Mail: export@bastra.de

Charging trolleys

We offer you high-quality charging trolleys from stainless steel that can be stacked in one another – designed for optimum use and maximum possible capacity. The illustrations below show charging trolleys for chambers with vertical circulating air. Trolleys with a higher number of levels are available for horizontal circulating air.

Six synthetic rollers enables easy movement and turning.

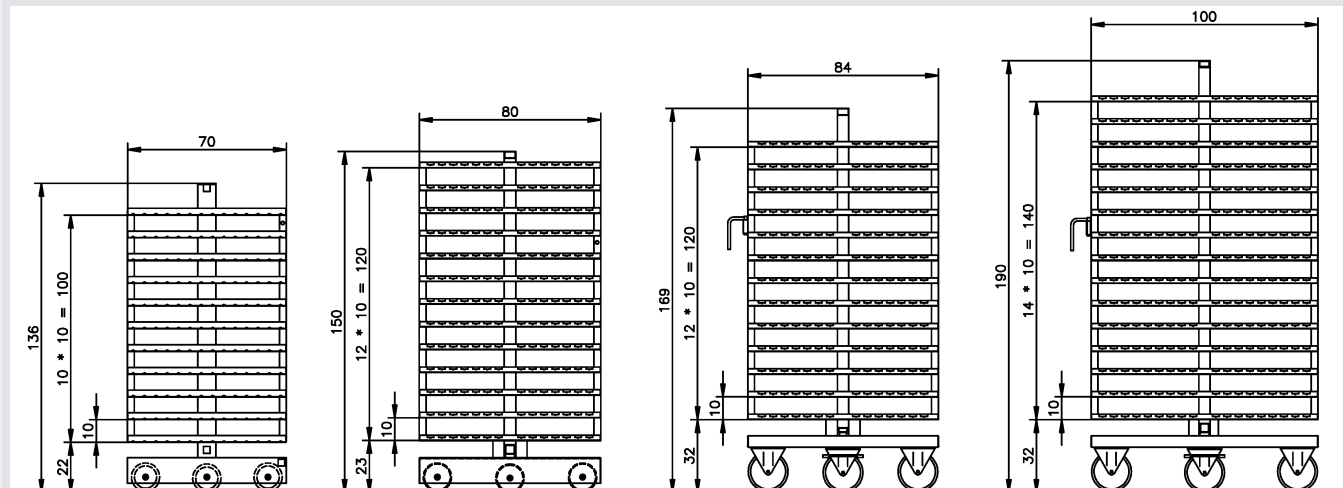


Charging trolley for BASTRAMAT 850/851
 Ext. dimensions: 83 x 70 x 136 cm
 Length of smoke stick: 80 cm
 Supports: 11 / vertical circulating air

Charging trolley for BASTRAMAT 1200/1201
 Ext. dimensions : 95 x 80 x 150 cm
 Length of smoke stick: 90 cm
 Supports: 13 / vertical circulating air
 Supports: 20 / horizontal circulating air

Charging trolley for BASTRAMAT 1500/1501
 Ext. dimensions : 101.5 x 84 x 169 cm
 Length of smoke stick: 100 cm
 Supports: 13 / vertical circulating air
 Supports: 22 / horizontal circulating air

Charging trolley for BASTRAMAT 2000/2001
 Ext. dimensions : 101.5 x 100 x 190 cm
 Length of smoke stick: 100 cm
 Supports: 15 / vertical circulating air
 Supports: 28 / horizontal circulating air



■ Our range comprises: Universal cooking and smoking installations, climatic maturing smoking systems, after maturing systems, cooking, roasting and baking chambers, intensive cooling installations, smoke generators, catalysers for smoking installations, cooking kettles, factory and warehouse equipment as well as hygiene devices for food producers and gastronomy ■