## **SDX® THERMOBOX**

# Handling hot food

### S D X THERMOBOX E

- The storage temperature of prepared food must not fall below +60°C. (see National Food Administration instructions)
- Food should not be kept hot for more than two hours. (see National Food Administration instructions)
- Food must be kept at the correct temperature before and during loading.
- Minimise the handling of hot food at room temperature.
- Use tight fitting lids to avoid spillage in the box.
- The box must be connected up to the time of transport.

#### **CARE & HANDLING INSTRUCTIONS**

- Connect the box as soon as possible after transport.
- Clean after transport. The box must not be connected to the mains when cleaning!
- Wash, rinse and dry out the equipment.
- Do not use a high-pressure washing appliance or mechanical washer
- Use a cleaning agent that is suitable for equipment for food.
- Do always use original cable set.
- E = electronic heating

#### Temperature

Good culinary art is essential whether it be a party or an everyday meal.

Many processes need to interact for the end result to be a meal that is appreciated. The temperature is a unifying theme throughout the whole sequence of events from primary produce to your plate.

Our interest in food begins when it leaves the pot, frying table or oven. **Time is tight!** 

It is preferable that the food is ready to be serves within two hours! The nutritive value and freshness of the food are negatively affected by the passage of time. For example, the holding time for potatoes is advised at less than one hour.

In the majority of cases, food is served in a dining area that is near to the kitchen, but it could also be transported shorter or longer distances to another site inside or outside of the building. Even though this time period might exceed two hours, the food must never fall below  $+60^{\circ}$  C!

Temperatures between +8° C and +60° C are critical because of the risk of bacteria growth.

Make sure you allow enough time!

#### **Prepare loading**

Prepare the loading of the food by ensuring the box is sufficiently hot! If the electric socket has a timer, you can connect the box directly after cleaning. Damage may occur to the equipment when handling and transporting and is particularly dangerous if it is the electrical system that is damaged. The safety the manufacturer has integrated which is guaranteed through CE marking may be jeopardised. Therefore **never** connect a box that shows signs of defects to the electrical system as these could cause personal injury.

When it is time to load:

Check the guide thermometer - it should not be under  $+70^{\circ}$  C!

#### From preparation to loading

All handling at room temperature results in major loss of heat.

This is particularly critical during the time it takes to remove the food from the oven and pots and move it into the THERMOBOX<sup>®</sup>. The fastest heat loss occurs during this time! If the food is to be divided into portions in containers, e.g. when special food is divided to different recievers, you need to be extra observant! Another process that deserves your attention is when the various parts of a meal are loaded into the same THERMOBOX<sup>®</sup> on different occasions. Each time the box is opened, an exchange of air occurs which means the air needs to be reheated.

Plan in a way that ensures the length and frequency of opening times are kept to a minimum! When the food is placed in the box, it must remain connected until it can be transported. Tight-fitting lids on the containers avoid spills and help particularly when cleaning!

#### Transport

Prior to and following transportation it is **important** to observe the following:

- Grip the plug **(not the cable)** when it is removed from the wall socket! The plug must be attached to the cable bearer, otherwise there is a major risk that it will fall down and trail behind the box, get jammed and be pulled apart. The spiral cable is by far the most exposed electrical component in THERMOBOX<sup>®</sup>!
- Secure the boxes using cargo tie-downs during transport. Avoid damaging the boxes by not tightening the cargo tie-downs too much!

A slow process of cooling takes place to the food during transport. This is usually no problem as THERMOBOX<sup>®</sup> has effective polyurethane insulation that prevents heat loss. The amount of heat loss is impossible to specify in an objective or meaningful way. The key factors are:

- insulation
- food heat content
- ambient temperature
- time

Even wind speed can be a factor when transporting outdoors. Adopting a systematic temperature control provides you with the information on where critical temperature loss occurs.

#### Reception

Connect THERMOBOX® directly on arrival!

#### Cleaning

THERMOBOX<sup>®</sup> is extremely easy to clean as it has pressed guides in a stainless steel inner container. Good results can be achieved using standard washingup detergents and a "shower nozzle". Rinse and dry out the box! Do not use high pressure cleaning! Tight-fitting lids on the containers avoid spills and help when cleaning!

#### **Premises and handling**

To achieve good results, the premises in which the boxes are organised must have a controlled temperature environment. When planning in a kitchen, both preparation and reception, it is imperative that transport is made on wheels. Be careful with your back and move the boxes on castors wherever possible! When it is time to procure transport, you should therefore take into consideration the capability of loading and unloading from a loading platform or if the haulier is to provide vehicles with back plate lifters. For smaller reception units that are at different levels to the ground, it is un avoidable that you handle portable boxes filled with food and containers. Our ergonomically designed trolleys facilitate this handling!

#### Evaluation and choice of handling system

The quality of the food is determined by the conditions that develop (or have developed) as the premises, equipment and organisation are all important factors. The temperature is an important quality factor. SDX<sup>®</sup> specialises in temperature maintenance during transportation. We, or one of our dealers, can usually lend or hire out boxes for potential customers to conduct a serious evaluation of the units, thus offering an excellent opportunity for testing the equipment in the appropriate environment, i.e. where it is to be used. By measuring the temperature of the food from loading to unloading, any weaknesses in the temperature chain, and the means with which to prevent them, can be identified.

#### Equipment purchase, hiring or leasing

Equipment can be purchased from some of the dealers listed on our website: **www.sdx.se**. A leasing agreement through SDX<sup>®</sup>, combined with a service agreement, will give you access to the latest technology for distribution and secure operation without the necessity for major investment.

For occasional needs or to test the appropriate equipment, you also have the option of hiring equipment from SDX<sup>®</sup>.

#### **Environmental considerations**

SDX<sup>®</sup> is certified in accordance with ISO 14001:2004 and ISO 9001:2000.

We place a great deal of emphasis on choosing materials with good resources efficiency. Long life is of the highest priority.

For a product which is designed to be in daily use for food distribution, over the coming 10-15 years, the use of chemicals for cleaning purposes is also of great importance to us. This is why we have put a great deal of energy into making the boxes easy to clean by developing a range of stainless steel components.

We recommend that our customers and users take measures to reduce the risk of food spillage in the box. This will facilitate cleaning and reduce the need for chemicals. Use tight-fitting lids for food distribution!

Energy consumption is also an important consideration. By choosing polyurethane insulation, which connects the outer and inner walls without the need for thermal bridges, and a patented heating system with electronic control that provides efficient heating, we have created the right conditions for low energy consumption.

To ensure the box is not connected to the mains for an unnecessarily long period of time, we recommend connecting the box to a socket fitted with a timer. By using a timer, you can ensure the box is hot when it is about to be used without it having to be kept on "for safety's sake".

#### Service

Regular servicing is a basic necessity for problem-free use. The equipment used for transportation is more exposed than other equipment. This is why it is important for you to check for any damage which might affect safety and functionality on a daily basis.

#### **Regular inspection**

A THERMOBOX<sup>®</sup> is subject to many different types of damage. To maintain good safety it is vital to inspect the boxes on a daily basis. **Always** check for visible damage to the electrical system before connecting!

Some particularly exposed components that should be given an extra inspection are:

- spiral cable (when replacing always fit a factory assembled cable!)
- castors (damaged castors mean the box could overturn or that the brakes fail.)

#### **Planned inspection**

We recommend regular and systematic inspection of the boxes.

We suggest you make the first inspection after six months to gain an appreciation of the level of wear. There may be several causes of damage or unnecessary wear that can be identified and fixed. As a result of this you can then determine the need for future inspections.

Maintenance can be arranged in-house or by entering into service agreements with respected companies. SDX<sup>®</sup> can provide the requisite support.

### When inspecting the following measures should be taken

#### **Heating system**

- Do not connect the box to an electrical outlet when conducting service work!
- Check earth connection between the plug's earth plate and the inner container and the lid of the connection housing.
- Carry out insulation test.
- Check for bad connections in the cable.
- Always fit a factory assembled cable when replacing
- Replace damaged components (see list of spare parts)

#### Miscellaneous

- Check castors and brakes.
- Check the door seals.
- Check and lubricate the lock and hinges.
- Replace damaged components (see list of spare parts)

#### Documentation

- Checking the boxes should be documented.
- All new boxes have a manufacturing number that can be used as an ID number in the documentation. For older boxes you may arrange your own ID number in-house.
- As a result you can prepare a log for each box that shows the measures that have been taken.







