

KOPA CHARCOAL OVENS

What is a charcoal oven?

Charcoal oven is a directly fired charcoal barbeque closed in an oven.

Oven is directly fired with wood charcoal and food is grilled directly over the charcoal just as in a conventional charcoal barbeque.

Grilling is done at high temperatures when the oven door is closed.

Due to high temperatures the food is grilled and not cooked or baked.

Advantages of KOPA charcoal ovens over other types of grills

Enclosing a charcoal barbeque in an oven has several advantages:

- **speed of grilling – 40% faster than on a open grill**

Closed space prevents heat to escape in the air and radiation of oven walls ensure that food starts cooking also on the top. This is not the case with conventional grills where only the part of food that is exposed to the heat is cooking. Therefore grilling in a KOPA oven is 40% or more faster than on any kind of open grill (electric, gas or charcoal)

- **quality of food – much juicier and with superior taste**

Grilling of food on a charcoal grill is a combination of radiation and convection.

Convection is caused by vertical movement of air and releasing some energy to the food as it is passing by. The downside of convection heating is that the air passing by also takes on the moisture from the meat and is therefore drying out the food.

Radiation is radiated directly from hot charcoal to the food.

Ideally we would like to have only radiation as this method does not dry out the food.

Controlled environment in the oven with two independent vents ensures that the ratio between radiation and convection is vastly improved towards radiation. This is the reason why the food coming from a KOPA charcoal oven is much juicier and has a superior taste.

- **Lower charcoal consumption – up to 50% less than on a conventional charcoal grill**

Because there is less air movement and less heat escapes to the environment the charcoal consumption is much lower than on a conventional charcoal grill. Depending on charcoal quality it can be up to 50% or even more lower than on a conventional charcoal grill.

- **Better working environment – Less heat in the kitchen**

Cooking with charcoal in a kitchen in the summer is not a very pleasant experience. Excessive sweating and exhaustion are common.

Charcoal oven walls are insulated and they prevent heat to escape towards the cook. Cooks are exposed to the heat only when oven door is

opened and even then much less than on a conventional charcoal grill. When the door is closed the charcoal oven is giving less heat than for example gas range.

- **Versatility – more different dishes**

KOPA charcoal oven is much versatile than a conventional grill. You can use the oven for normal grilling just as you would a conventional charcoal grill, but besides that you can also use pans and prepare all kind of dishes from shell fish to potatoes. From gratins to sweets. You can use it to prepare dishes from scratch or to finish pre prepared dishes. Some chefs very successfully use the oven as their sole cooking apparatus.

Advantages of KOPA oven vs. other brands

- **Quality of build in respect to price**

We use best materials and high quality finish and are pricewise still below the established brands

- **Better insulation**

You can touch KOPA oven while it is in operation and (except on the edge of the door frame) would not burn your fingers if you touch the oven

- **Lower consumption**

Charcoal consumption is lowest on the market. This is also due to superb insulation that is used in KOPA ovens.

- **Light door**

The door of the oven is much lighter than on the oven of market leader. This is important if you open and close the door more than 100 times per shift.

- **Design**

We think that KOPA is also most beautiful oven on the market.

Materials:

Inside of the chamber: Refractory steel 6m

Between the outer and inner wall: Zinc coated steel plates with ceramic wool in between.

Outside: Stainless steel and enamel coating or heat resistant powder coating

Color options:

- red (powder coated)
- black (enamel)
- brown (enamel)
- shiny steel and gold (additional cost)



Layouts:

Basic:



Just the oven. User needs a steel table to put the oven on top of it. If a steel table of older kind with wooden combination is used, than an insulation board is needed

C – Layout



Oven and heated closed cabinet on top. Closed cabinet is used to keep food warm and to preheat the food. The cabinet is heated via chimney and the temperature inside is dependent of the temperature in the oven. Equipped with one height adjustable shelf.

OC – Layout



Here instead of a closed cabinet there is a open heated rack on top. The shelves are heated via hot air exiting the oven ventilation holes on the top of the oven.

Temperature here is of course lower than in the closed cabinet. Shelf is height adjustable.

All of these layouts are available on closed and open stands that can be on legs or wheels:



Above are examples on a closed stand. Open stand can be seen below:



Stands and cabinets can be also purchased after initial purchase and are easy to attach to the basic oven with simple tools.

Accessories:

Accessories include:

- KOPA tong (1 pc included with the oven)
- Heat protected gloves made of Kevlar
- Stainless steel brush
- Grabbers for picking up pans
- Electric charcoal lighter

Included items:

All KOPA ovens come equipped with KOPA tong and with fire break. Type 300 comes with 1 Grill rack and Types 400 and 500 come with two Grill racks. This is not usual with competition and this has to be taken into account when comparing prices.

Functioning of the oven:

For light up see following video:

<https://vimeo.com/album/4573169/video/142748667>

For use see following video:

<https://vimeo.com/album/4573169/video/142751037>

For cleaning see following video:

<https://vimeo.com/album/4573169/video/182070985>

Notes on functioning:

It is very important to tell users that they need to close the lower vent when the desired temperature is reached. If they let the lower vent open the temperature will continue to rise and that can damage the oven and it will make the oven unusable for cooking for a longer period of time.

Also very important is to always use Firebreak with the oven to prevent fire.

Consumption

Oven model:	Type 300	Type 400	Type 500
Lunch:	2,0 kg-2,4 kg	2,3 kg - 2,7 kg	3,1 kg - 4,1 kg
Dinner:	2,4 kg-3,8 kg	2,7 kg - 4,4 kg	3,6 kg - 6,6 kg
Total daily:	4,4 kg-7,1 kg	6,0 kg - 8,0 kg	8,0 kg - 12,0 kg

Maintenance:

There is not much that goes wrong with KOPA ovens. One of the most common breaks are the springs. These can be easily replaced and the whole process takes about 20 minutes.

Other thing is the Thermometer that gets broken by users. Replacing that takes about 20 seconds.

Charcoal grid is excluded from the warranty. It is wise to make users aware of that. The lifespan of the charcoal grid depends of the usage. If users let the temperature of the oven rise often over 400°C then this will shorten the life span of the charcoal grid. Charcoal grid is segmented and can be repositioned in the oven or turned around to prolong lifespan.