

Fact Sheet of the Highly Efficient Stove Save80®

The name "Save80" means that an experienced person can save 80% of the firewood consumption of a traditional open fireplace (3-stone-fire). The "Save80" needs around 250 g of dry firewood to bring 6 litres of water to the boil.

Nominal effective thermal power: 1.5 kW
Pot capacity: 8 litres
Recommended pot content: 6 litres

The interior parts of "Save80" are made of stainless steel to ensure a life-span of many years, high efficiency and burning at high temperatures for complete combustion with low emission of smoke.

Time for bringing 6 litres of water to the boil:
about 25 minutes

The supply of air is regulated automatically by the design of the cooker.

"Save80" is not affected by the wind.

Manufacturing information: Mass production has started; capacity of production can be adapted in a short time to any quantity needed.

Transport Information "Save80"

Packaging dimensions: width: 35 cm; height: 45 cm.

Weight: about 5 kg

Weight of pot with lid: about 1 kg

"Save80" is delivered in parts. One 40 foot sea container holds about 2000 Save80-kits.

Assembling is simple and can be learnt quickly by men and women.

Basic Rules for the Use of "Save80"

"Save80" can be used mainly for cooking, frying and deep frying.

Kindling is done by setting fire to a sheet of paper and some small pieces of wood in the burning chamber. When the fire is lighting, the pot is inserted. Afterwards the fire is maintained by throwing small firewood sticks through the quadratic aperture.

What is of particular importance is, that small pieces of wood, which are not traditionally collected and burnt, can be used in the "Save80".



Fact Sheet of the Heat Retaining Box Wonderbox®

The "Wonderbox" is used for cooking with retained heat and for conserving high temperature of the content for many hours. It is suited to the 8-litre-pot (with lid) of "Save80".

After 2 hours the temperature of 6 litres of water will decrease from 100°C to about 90°C; after 12 hours the temperature is still above 65°C.

The "Wonderbox" can save more than half of the firewood consumption, in addition to the saving by the "Save80".

The material of the "Wonderbox" is specially designed for the heat retaining of food and water, up to the boiling point and has a life-span of years (no polystyrene).

Manufacturing information: Mass production has started; capacity of production can be adapted in a short time to any quantity needed

Transport Information "Wonderbox"

Weight (upper and lower part): about 900 grams

The parts are stackable

About 2000 "Wonderboxes" can be transported in a 40-foot sea container, in addition to about 2000 "Save80"-kits.

Basic Rules for the Use of the "Wonderbox"

Cooking by retained heat is very simple and needs no surveillance.

The pot is introduced into the lower part and the "Wonderbox" is closed by putting on the upper part. After bringing the pot content to boiling point, the pot is introduced into the "Wonderbox". Porridge, for example, can be cooked without stirring.



Examples for Using Save80[®] in Combination with Wonderbox[®]

(According to the experience of cooking instructor Imma Seifert, Neuötting)

Note: The higher the amount of cooked water or food in the 8 litre-pot, the larger is the percentage of firewood saved by "Save80" and "Wonderbox"

Rice

- 5 litres of water, 800 g rice

Bring the water (with a teaspoonful of salt) to the boil by "Save80" and add the rice. Boil it up and place the pot with lid into the heat retaining box. The rice is ready after 30 minutes in the "Wonderbox".

Fire wood consumption: about 250 g

Dried Vegetables (Beans, Peas, Lentils)

- 4,5 litres of water, 1 kg dried vegetables

Add the dried vegetables to the cold water, without salt and bring it to the boil by the "Save80". Boil up and put the pot with lid into the "Wonderbox". After about 2 hours the peas, beans or lentils are cooked. Season only at the end. Soak the beans (especially large beans) overnight in cold water.

The "Wonderbox" saves all the labour usually connected with the time and firewood consuming cooking of dried vegetables. The pot remains in the box without supervision and without any fire burning.

Firewood consumption: about 250 g

Maize porridge

- 5 litres of water, 1 kg maize flour

Bring the water to the boil and pour the maize meal into the boiling water stirring continuously. Boil up briefly and put the pot with lid into the "Wonderbox". After 30 minutes the porridge is ready.

The porridge is the same grade as encountered in Africa. The smaller the amount of maize porridge one is preparing, the better the mixing has to be done. Minimum time in the "Wonderbox" is half an hour.

The "Wonderbox" saves the tedious stirring of the porridge when it is thickening and it avoids the danger of scorching. In a well closed heat retaining box the porridge is kept hot, unattended, for many hours.

Firewood consumption: less than 300 g



Potatoes

- 3 kg potatoes (large potatoes cut into halves), 3 litres of water

Put the potatoes into the pot with the cold water. Heat it to the boiling point by "Save80". This takes about 25 minutes. Cook the potatoes 5 minutes.

Transfer the pot with the boiling content into the "Wonderbox". It takes 30 minutes in the "Wonderbox" to finish the cooking of the potatoes.

Firewood consumption: about 250 g

Meat and chicken (comparative test)

- 800 g meat (400 g one lump; 400 g cut into pieces), a big chicken leg, 6 litres of water, some vegetables, herbs

The pot content was brought to the boil and the pot was transferred to the "Wonderbox". Before the transfer to the "Wonderbox", the big piece of beef (400g) was half done, the smaller pieces were nearly cooked. The chicken was already finished. After two hours in the "Wonderbox" the chicken meat was detached from the bone and was very soft. The meat was well done.

Firewood consumption: about 250 g

Fish

Boiling fish:

- 3 fishes (trout), each 250 g, 2 litres of fish brew

Bring the brew with the spices to the boil by "Save80". Then insert the fish into the brew. Place the pot with lid into the "Wonderbox". The cooking is finished after 30 minutes.

Firewood consumption: about 200 g

Frying fish:

- fish, cooking oil/fat, spices

For frying by "Save80" use a low fire in the burning chamber. Pour cooking oil/fat into the pot and fry the prepared fish.

Firewood consumption: less than 200 g

Flatbread

- 260 g flour, 20 g yeast, 120 g water, spices: salt, fennel, coriander, caraway

Roll 8 thin flatbreads (diameter about 15 cm). Brush the flatbread with vegetable oil before baking. It takes about 2 minutes to bake a flatbread (about 1 minute each side) on the bottom of the pot - without using a lid. Baking of flatbread is quick and un-problematic, if an appropriate small shovel is used for turn-over and taking out of the bread.

Firewood consumption: In total about 160 g (20 g per bread).

