MUS The multi-use stove.

Production: Simple to produce

- By hand by local tinsmith or craftsmen
- By mechanical workshops.
- By mass-production

Practical use

- As a two blaze household cooking stove
- Easy to move the pan for simmering
- As a energy unit for huge pan cooking at institutional kitchen.(more units together)
- As a room and water-heater
- For grilling and camping
- Rescue stove and refugee camps

Fuel (Simple adjustment to type of fuel, less dense fuel need a bigger volume)

- Pellets..10cm x 14 x 15-50 cm hwl
- Chopped wood. (size depend of type)
- Woodchips. (size depend of type)
- Briquettes (size depend of type)
- Wood-sticks (size depend of type)

Advantages

- Fuel conserving, fuel-consumption easy to adjust to need of energy
- Possible to refill.
- The two blazes cooking, makes it easy to make a meal on one filling
- Same unit .for household and institutional cooking
- Smokeless and clean burning. No soot (depend a bit on type of fuel)
- The pot will come closer to the glowing charcoal for longer simmering
- · Easy to empty the ashes and leftover char

The multi-stove is not jet official tested for emission, soot and tar, but looks promising. The stove needs more testing and some design is needed before the final product is ready for production.

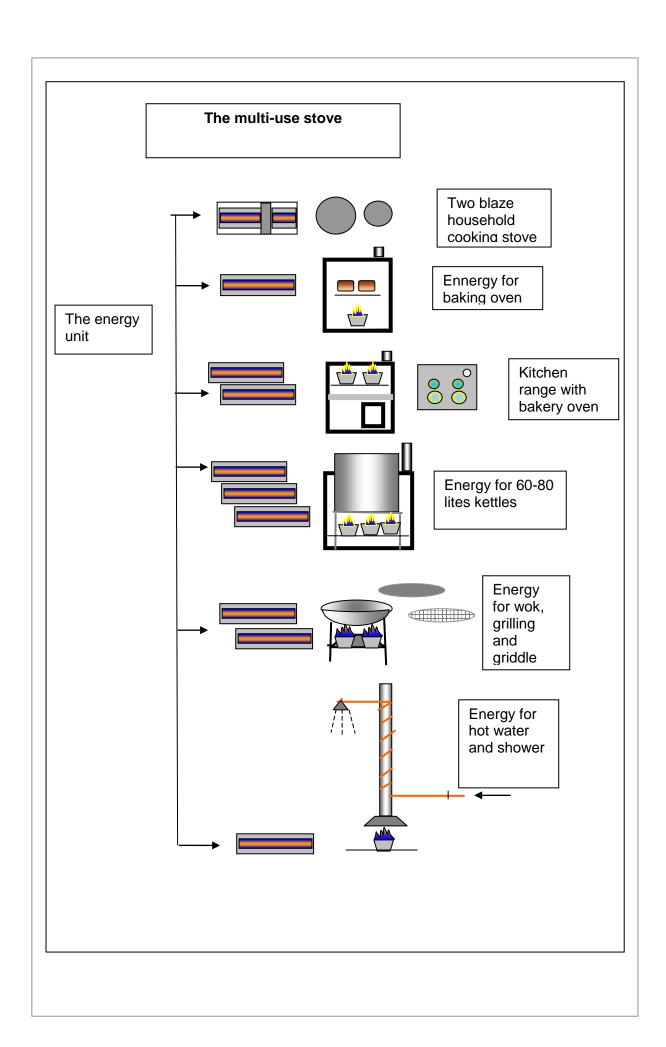
Practical stove tests carried out by PW 01.2010

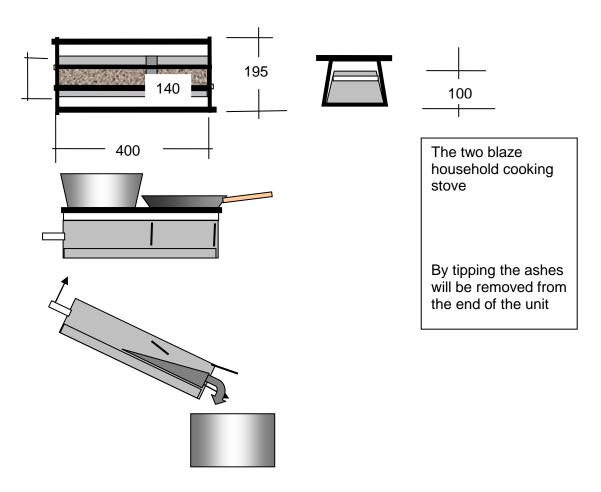
| Type of Stove | Type of fuel | Quantity | Minutes to boil 5 litre of water | Time of boiling ca | Time with flame ca |
|---------------|--------------|----------|----------------------------------|--------------------|--------------------|
| Peko Pe 5L | Chopped wood | 1000 gr | 24 minutes | 25 minutes | 50 minutes |
| Peko Pe 3L | Pellets | 1000 gr | 30 minutes | 40 minutes | 65 minutes |
| MUS15 | Pellets | 500gr | 32 minutes | 17 minutes | 60 minutes |
| MUS 40 | Pellets | 1000 gr | 30 minutes | 90 minutes | 2 hours |

| Type of stove | Type of fuel | Minutes of cooking temperature | Time to boil 1 litre | Time to boil 3litre | Time to frying |
|---------------|--------------|--------------------------------|-------------------------|------------------------|----------------|
| MUS 40 | pellets | 1:30 minutes | 5 minutes | 13 minutes | 50 minutes |
| MUS 40 | Chopped wood | 55 minutes | 6 minutes | 15 minutes | 50 minutes |

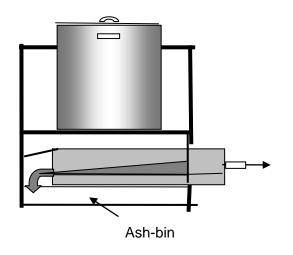
Water-temperature for 5 litres tests 18 -98 °C for 1 litres test 13- 98 °C

Time-consumption can differ depending a bit on the use of one or two blaze at the same time..





Ashtray or bucket



By the institutional kitchen stove, the ash will be removed from the energy unit . when pulling out the unit for filling

The multi-use stove 30/07/2009 Paal Wendelbo paaw@online.no









The houshold –stove One or two blaze

1 kg pellets wll be burning 70 minutes 500 gr c hopped wood burning 40minutes, by topping up a bit longer

Also wood stick will do as fuel, feeding from the end.

The twoblaze household stove can ven be used for grilling

Two energy units sufficient for 20 litre
Three unit for 30-60 litres

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