



## Induction Cooking.

### INDUCTION PRINCIPLE

Induction hobs work very differently to your conventional electric hob, where as ceramic and gas hobs work by the transfer of heat to the pan induction hobs use a magnetic induction coil located under each heating zone. When it is switched on, it produces a variable electromagnetic field which in turn produces inductive currents in the magnetic bottom plate of the pan. The result is the pan located on the heating zone directly heats up, but the hob does not. This allows for extremely quick heating times when compared to alternative hobs like gas or ceramic.

Of course to allow this to happen the pan has to be made of the correct material:

- › All ferromagnetic pans are recommended for example cast iron and steel pans, enamelled pans, stainless-steel pans with ferromagnetic bottoms. The suitability of pans can be checked with a small magnet, if it sticks you can use it. Alternatively when purchasing new pans check the packing to confirm they can be used with induction hobs.
- › The following pans cannot be used with induction hobs: copper, pure stainless-steel, aluminium, glass, ceramic and stoneware.

The induction heating zones can adapt automatically to the size of the pan, reducing any wasted energy. A pan with a very small diameter may not be detected, the required pan diameter varies from hob to hob and zone to zone, please check the instruction manual for further information.

If the pan is not the correct material for induction cooking or too small for the zone the hob will not recognise the pan and will indicate this in the display.

### Q & A

#### Q: MY PANS MAKE A NOISE WHEN COOKING

A: Certain pans can make a crackling or clicking noise when they are placed on an induction cooking zone. This noise does not mean there is a fault with the appliance or pan and will not influence the cooking operating, this is completely normal.

#### Q: I CAN HEAR A BUZZING NOISE WHEN USING A HIGH HEAT SETTING

A: This is normal, the noise should quieten down or disappear completely when you decrease the heat setting.

**Q: I SEEM TO BE GETTING CONDENSATION FROM PANS ON MY COOKER HOOD.**

A: Induction hobs are a very energy efficient way of cooking. One of the great benefits is they do not produce any heat themselves. This lack of extraneous heat however does have a side effect in that there is no hot air as you would find in a conventional electric or gas hob, to warm any cold surfaces that water vapour from what is being cooked may come into contact with. Consequently, some of the water vapour and steam produced by the cooking process will condense on these cold surfaces. The amount of condensation on any particular surface will depend on many factors including the ambient temperature in the kitchen, the temperature of the surfaces, the thickness and material from which the surface is made and the type of cooking. You can help reduce this by switching on your extractor 15 minutes before cooking and allowing it to run for 15 minutes after you have finished. This will ensure that the air in the kitchen is being circulated before cooking commences and the air continues to be being cleaned for a short while after, giving you the best results. Further to this as with any hob cooking with lids on the pans and reducing to a simmer once boiling is reached will help to reduce excess steam and save energy.

**Q: THE FAN RUNS EVEN WHEN I HAVE SWITCHED THE HOB OFF**

A: This is normal, the fan will switch off automatically once the hob has sufficiently cooled.

If you have any questions or would like advice on induction cooking, please contact Caple on 0117 938 1900.