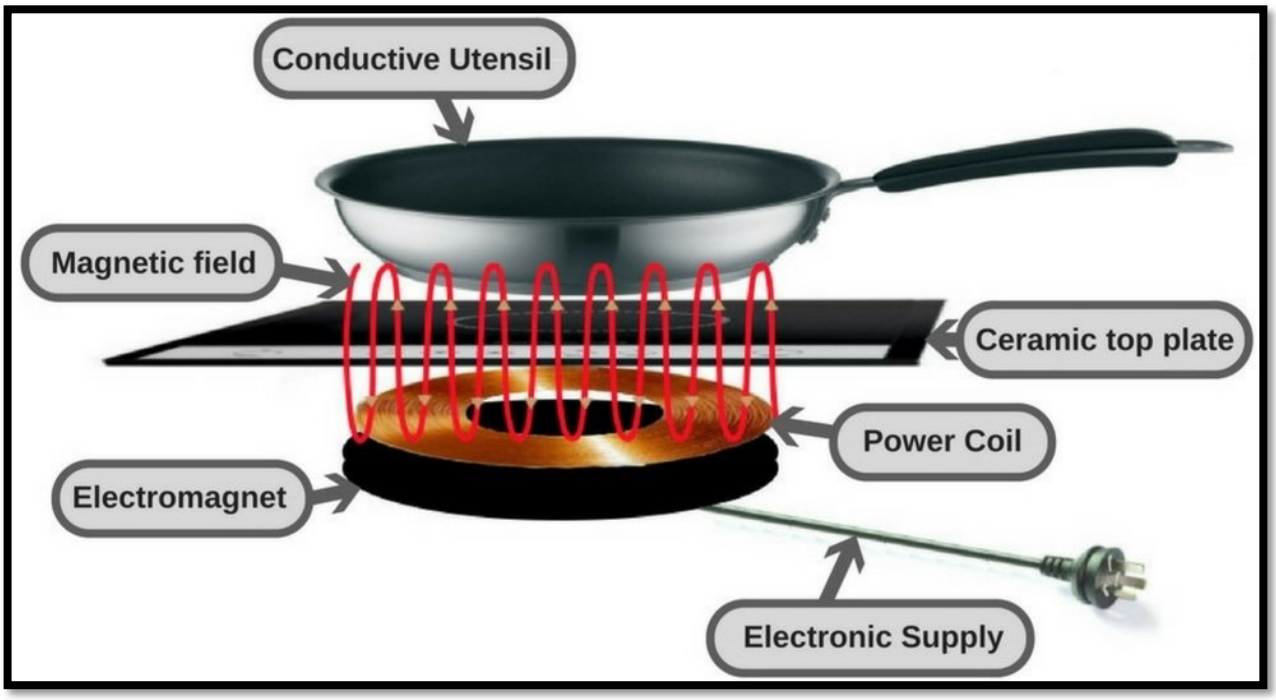
Induction Cooktop



There have been several technological advancements in almost every application. The technological products used for domestic purposes are not an exception to these advancements. An induction cooktop can be considered one of the best examples.

An induction cooktop is a technology developed to deliver precise heat to the cookware, thus allowing a user to cook efficiently. Super-fast heating, and the ability to change the temperature settings precisely are the reasons behind the increasing popularity of the induction cooktop.

The induction cooktop works on the principle of electromagnetic induction. Unlike gas and electric cooktop, the induction cooktops use a series of magnets. The iron atoms of the cooking pan placed on the induction cooktop are excited by the series of magnets, after turning the power ON.

The induction cooktop consists of a glass or ceramic top plate, over which cookware with a flat bottom is kept to cook the food. Just under the top plate, there is a metal coil (power coil), which is electronically controlled. When you connect this cooktop to the AC mains and turn the

power ON, the alternating current from the mains generates a fluctuating magnetic field in the coil. This constantly changing magnetic field is induced in the conductive utensil (cooking pan) placed on the cooking top. The fluctuating magnetic field generates an electric current in the cooking pan. This current has a lot of energy. As it keeps on moving inside the pan, it dissipates the energy in the form of heat. The heat generated heats up the food contained in the pan and cooks it.

The induction cooktops are being used increasingly in many residential, as well as commercial areas, owing to its several benefits. The following are some important ones.

1. **Faster Heating:** An induction cooktop can heat the content of the cooking pan kept on it much faster than a gas.
2. **Better Efficiency Rate:**

Cooking Device	**Traditional Gas Burner**	**Electric Cookers**	**Induction Cooktop**
Efficiency Rate	40%	50-60%	~90%

3. **No Ambient Heat:** Unlike a traditional gas burner, an induction cooktop only heats the cookware, and does not generate any ambient heat. This helps reduce the heat loss.
4. **Easy Cleaning:** You can easily clean the cooking surface of the induction cooktop with a damp cloth.

The induction cooktops are designed to be used only with conductive utensils or cookware. You can use cookware made from ferrous metals, such as cast iron or steel. The induction cooktop is not suitable for use with aluminum, glass, or ceramic cookware.