

# Steam iron - Step 1: The different functions

The aim here is to understand what a steam iron is, what it is, and how to visualize the different electronics that make it up.

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#### INTRODUCTION

The following guide is for an iron with a separate tank. The manufacturer is Philips and the model is PerfectCare Viva Centrale vapeur - GC7015/20

At first glance, it looks like a normal steam iron, but I can assure that it is much more than a traditional steam iron. It has a separate XL water tank that increases the autonomy of the appliance and allows you to add water during ironing. In addition, this steam iron lacks one feature that most other steam irons have. Indeed, the "iron with XL tank" does not produce high pressure steam. We will see why in the Step 2 tutorial "how does it work?"

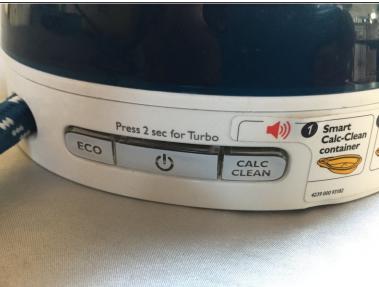
### Step 1 — What are the functions of an iron?



- The name iron comes from the actual metal that the appliance is made from. The shape of the iron, pointed at its end, allows you to iron all the corners of the clothes, while its weight smoothes the fabric.
- The part of the iron that makes direct contact with the fabric is called the "sole (plate)". In order for the iron to be effective, then the device needs to be heated. This iron also makes use of a steam system, which makes it possible to humidify the fabric during the ironing process.
- Ironing helps loosen the bonds between the long chains of molecules that make up polymer fiber materials. The heat and weight of the iron stretches the fibers while the fabric retains its new shape once it's cooled. Some materials, like cotton, require the use of water to loosen intermolecular bonds.
- (i) Information about steam irons
- (i) Information (2) on steam irons
- Wikipedia link Clothes iron

## Step 2 — Device description





- The iron rests on a reservoir with a temperature-resistant base.
- At the front of the water tank, a removable spout serves as a funnel to allow a user to fill the reservoir with water (1.7l)
- Theirs a button on the top of the device, which locks the iron to the reservoir base.
- At the rear is a control panel made up of three buttons.

#### Step 3 — Device controls







- The control panel consists of three buttons. the Central button = On/Off, the Left button = Eco
  Mode, and the Right button = Anti-limescale function
- Central button: allows the iron to operate with a short press. When the button is pressed a steady blue light comes on. After approximately 2 minutes, the appliance beeps to signal that the peak temperature has been reached and that the iron is ready to be used.
  - (i) A long press on this button while ironing switches to "Turbo" mode. The iron will emit more steam, and the blue light turns white.
- Left button: pressing this button during ironing will decrease the volume of steam along with the temperature of the iron.
- Right button: This function helps prevent limescale deposits. By pressing this button the iron will produce steam continuously for 2 minutes in Turbo mode.
- (i) The button for sending steam is located on the handle of the iron. This button is fitted with a light which flashes until the temperature is reached on start-up.

We now know what an XL reservoir steam iron is and what these different features are. We can move on to studying how it works in the following tutorial: "a steam iron, how does it work?"