

Induction Cooktops

Power, precision, safety and style





Cooking can be a source of relaxation, an outlet for creativity or a time to bond with family and friends. Induction technology can enhance those experiences through better performance, increased safety and even protect the health of everyone in your home. The sleek look of an induction cooktop can also add to the beauty of your kitchen. This guide will introduce you to the benefits of cooking with induction: power, precision, safety and style.





Testimonials from SMUD research

Faster cooking time

"I had assumed I would need to change my cooking habits in some vague, unknown way, but the switch was easy; I was able to cook exactly as before, only faster."

"It was so fast—I was able to boil water or get oil hot in a matter of seconds for the oil, about a minute for the water, I LOVE IT!!!"

Speed of heating

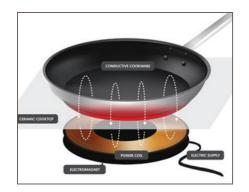
"I have never used an induction device before but was aware that they are known for even heating.

I have used it multiple times for different dishes and each time have been very impressed on how quickly it heats up and how evenly the food cooks. I really like how I can switch between the heat settings during cooking without interruption."

Safety

"Safety of touching surface helped me consider non-gas cooking."

"It lets less heat into a room—should be a real positive for summer. I think it would be safer if you had small children in the home."





How induction works

The power of induction comes from an electromagnetic field, created by passing electricity through a coil below the surface of the cooktop. The magnetic field strikes the iron molecules in your cookware, producing heat. Induction is faster and more efficient than cooking with gas or standard electric stoves because it eliminates the intermediate step of heating up a burner and then transferring that heat to the cookware.

Induction only heats the cookware putting the heat where you want it – in your pan.

Restaurants and home cooks have been warming to induction because it cooks faster and responds quickly when the temperature is dialed back, providing unmatched precision and control over the cooking experience

Safer

Unlike electric appliances, gas appliances have open flames, increasing the risk of fire. Converting to electric appliances removes that danger. Plus, going all-electric eliminates the risk of gas leaks and carbon monoxide building up inside your home.

- No open flame reduces the risk of fire. It also means no combustion fumes and no harmful gasses like carbon monoxide, and less need for venting. That makes for a smarter, safer kitchen.
 - More than 150 people in the United States die every year from accidental non-fire-related carbon monoxide poisoning.
- Induction cooktops only heat steel or iron cookware which allows the ceramic cooktop to quickly return to a safe temperature as soon as the cookware is



removed. And spills won't burn or flare like they can on a gas stovetop.

An induction element stops heating when a pan is removed. This prevents a forgetful moment in your busy life where a burner stays on unintentionally.

Precision and performance

Induction cooktops have precise temperature controls that respond faster than gas or standard electric cooktops. When you raise the temperature, it will quickly heat up. When you lower the temperature, it will quickly cool down.





Induction can also deliver the very low, even heat that's required to make certain sauces and confections.

This technology also outperforms gas and standard electric stovetops by heating twice as fast. You can bring a pot of water to a boil in less than half the time as gas. Less time cooking means more time for the things that matter to you.

Healthier

Induction cooking protects your family's health. According to the International Journal of Epidemiology, children living in homes with gas stoves are 42% more likely to experience asthma.

- Better indoor air quality.
 - Eliminates the indoor air pollution that gas stoves release into your home. These pollutants include nitrogen oxide, formaldehyde and carbon monoxide.
 - On average, we spend about 90% of our time indoors, where pollutant levels are often higher than those outside.
 - Indoor pollution is estimated to cause hundreds of thousands of respiratory health problems each year.

Easy to maintain

Since the surface only heats magnetic cookware, you can clean as you go, and a quick swipe is usually all you need.

An added bonus is extra counter space!





Cooler kitchen

Induction cooktops heat up efficiently. About 80 to 90% of the energy goes directly into the cookware.

- Induction is far more efficient than gas or electric resistance stoves, which means more of the heat goes into your cooking and not into your kitchen.
- Induction: 80 to 90% efficient with just 10 to 20% of the energy wasted as heat into your kitchen.
- Electric resistance: 70 to 80% efficient with 20 to 30% of the energy wasted as heat into your kitchen.
- Gas: 30 to 40% efficient with 60 to 70% of the energy wasted as heat into your kitchen.





Cookware

Use ferrous (magnetic) cookware. When in doubt, pull your magnet out! If it sticks to the bottom of your pans, they'll work with induction cooktops.

Look for this symbol:



Note: Some stainless steel pans DON'T contain iron and aren't compatible with induction.



Cast iron



Enameled iron



Stainless steel



Blue or black carbon steel

What you can do with induction?



Boil



Simmer



Sear



Glaze



Helpful guidelines

Do:

- Make sure the cookware you use is smooth and flat-bottomed, to ensure good contact and even heating.
- Clean up spills straight away. Food is less likely to bake onto an induction cooktop, but it's better to clean as you go.

Don't:

- Don't slide or bang pots on the glass surface or use abrasive cleaners. The surface is tough, but can crack and scratch.
- Don't place magnetic items on the cooktop like foil, metal cooking tools or cell phones.
- Don't use the cooktop as a chopping block. A flat induction cooktop can double as kitchen workspace, but use care.
- Don't assume the cooktop is completely cool. It will get hot from the cookware but the heat dissipates quickly. Most cooktops have a warning light that indicates when it's safe to touch the cooktop.

SMUD rebates

\$750 Gas-to-Electric

- Submit online with receipt and pre- and post-installation photos
- Requires a 240V, 30 50 amp circuit

\$100 Electric-to-Electric

Learn more at smud.org/Induction

