

THE HIE



Roger Yuen demonstrates his skills at an induction wok station at the Harbour Plaza North Point Hotel's Hoi Yat Yeen restaurant.

PHOTO: KAY YUEN

AT IS ON



Why chefs are warming to induction cooking

By Robin Lynam



ROGER YUEN got a major shock when he took over as Executive Chef-Western at the Harbour Plaza North Point Hotel. He discovered he was to take over a flameless kitchen. "I had already been a professional chef for 20 years by then and had always used gas," he recalls. "It took me one or two weeks to get used to it, but after that there was no looking back".

Although all-electric kitchens featuring induction cookers are now popular in private homes, professional kitchen operators are only just beginning to recognise the potential of the technology. The Harbour Plaza North Point is a pioneer in this respect, and has used induction and conventional electric equipment exclusively in the kitchen for its international restaurant, Green's, for five years.

There are also two induction wok stations in the kitchen for its acclaimed Chinese restaurant, Hoi Yat Heen, which serves Cantonese, Sichuan and Shanghainese specialities.

"Because Green's serves Asian and Western food we have two wok stations, four electric ovens, and eight induction heads. It's safer, it's cleaner and it's much less noisy, so communication is much better. The equipment is strongly built and very reliable. Furthermore, using induction equipment saves around one quarter of the total cost of cooking with gas," says Chef Yuen emphatically.

He concedes that it took time to get used to cooking without a naked flame, but says that the cooking techniques he uses have required little or no modification, and that the quality of the dishes remains exactly the same.

Green's cuisine reflects Chef Yuen's wide-ranging kitchen experience gained over more than two decades. Born and raised in Hong Kong, his first love, naturally, was Cantonese cuisine, but he has learned the disciplines of the major Western styles and also spent a year and a half in Bangkok immersing himself in the art of preparing Thai food. He is renowned for his Hainanese Chicken Rice and Veal Chop with Strawberry Sauce – recipes perfected over an open flame and now executed, otherwise identically, over an induction head.

Surprisingly he also says that, contrary to what most chefs believe, induction can offer more intense heat than flame, and can, for some dishes, actually reduce cooking times. “After one minute you have heat which is stronger than gas,” he explains. “It’s not hard to re-train chefs to work with induction equipment, but you do have to concentrate. Because you don’t see a flame, you have to remember which pans are being heated. And because heat can be very intense, it’s easy to overcook.”

Kitchen accidents, however, are rarer. Because the induction heads themselves remain relatively cool, the risk of kitchen fires or of staff suffering burns is reduced.

Induction cooking technology has been around for longer than most people think. The technology is based on using an electromagnetic field to transfer or “induce” energy into a conductive cooking vessel, such as a wok, pot or pan, making the cooking utensil itself the generator of the heat which cooks the food. The idea was pioneered in the United States in the early 1970s and has gradually won acceptance in many private homes around the world, but has taken longer to catch on in professional kitchens.

Recent years however have seen the development of induction appliances – wok stations are a good example – sufficiently similar in appearance and operation to their gas-powered counterparts to appeal to even fairly traditionally minded

chefs. The rising cost of energy and a growing awareness of induction cooking’s environmental benefits have also helped put a spotlight on the technology.

HK Electric’s General Manager (Group Commercial) Dr W K Chu is encouraged by the level of adoption of electric and induction cooking in Hong Kong’s professional kitchens, but would still like to see more.

“The technology did not kindle much interest in Hong Kong until 2001 when HK Electric involved itself in the development of suitable appliances for the market,” recalls Dr Chu. “Induction became popular because the users realised the advantages of the equipment. This change indicates that electric cooking has now been successfully launched in the commercial sector, and is in use in around 30 per cent of the commercial kitchens in HK Electric’s supply area.”

He points out that kitchens which dispense with gas also dispose of the toxic by-products of combustion and that because the heads of induction cookers are completely sealed in ceramic glass, spillages are much easier to clean up.

The most persuasive arguments for induction cooking are probably the improvements it offers to the kitchen environment, and the savings it offers in energy costs. HK Electric stresses both advantages when talking to potential users of the technology about making a switch.

Contrary to what most chefs believe, induction can offer more intense heat than flame



Paella

(serves 8)

Ingredients

2 chicken thighs, cut into pieces	Rice, wash and drain 400g
8 mussels	Paprika 1/2 teaspoons
8 prawns, trim, keep the shell	Worcestershire sauce few drops
1 squid, cut into rings	Tabasco few drops
1 Onion, diced 100g	Saffron 1 teaspoon
1 capsicum, diced	Chicken broth 450ml
3 tomatoes, peel, deseed and dice	White wine 50ml
Green peas, 100g	Garlic Puree 1 tablespoon
Olive oil, 2 tablespoons	Salt, pepper pinch

Instructions

1. Season chicken pieces with salt, pepper, paprika, Worcestershire sauce and tabasco for 1 hour.
2. Fry the garlic with olive oil, add chicken, onion, capsicum and rice. Stir for a while.
3. Add white wine, cook until the rice is partly done. Add saffron, salt, pepper and chicken broth. Continue to cook in pan for about 5 minutes. Transfer to the electric rice cooker and cook for 8 minutes.
4. Place the mussels, prawns and squid on rice, cook for another 8 minutes. Sprinkle in diced tomatoes and green peas, keep covered for 5 more minutes and serve.



HOME COOKING

ALTHOUGH SINGLE-HEAD induction cookers have been available in Hong Kong for some time, a willingness to install multi-head units in place of gas burners is relatively recent. Younger people choosing to cook at home, and the popularity of designs featuring kitchens open to living areas, probably account in part for rising demand.

The units have the advantage of being easy to install, and there is an induction cooker to suit just



about every budget, with the more expensive units incorporating a variety of sophisticated extra features, such as programmable timers. All units are equipped with a high temperature cut-off function.

About 15 per cent of domestic electricity users who bought cookers for their kitchens in the last two years selected induction cookers, and property developers who previously favoured gas-only units have become amenable to installing dual fuel cookers in new apartments. Some developers have even accepted the concept of all electric kitchens in which induction units usually play a role.

Several initiatives have helped create this climate of acceptance, including cooking demonstrations at HK Electric's Commercial Kitchen Centre in North Point and road shows in various districts and department stores, made possible by the high degree of portability of the equipment.

"Hotels and other institutional commercial users, such as hospitals and universities, regard environmental issues as more important. On the other hand restaurants generally think of the operating cost as a more important issue," says Dr Chu.

In addition to the Harbour Plaza North Point, hotels now using induction wok stations include the City Garden Hotel, the Park Lane Hong Kong Hotel, the Grand Hyatt Hotel and the South Pacific Hotel. The Tung Wah Group of Hospitals (at its Fong Shu Chuen Social Service Building) and the Hong Kong Jockey Club have also installed similar equipment.

"There is not much difference between induction and conventional gas cooking. It is very difficult to distinguish between dishes cooked by the two different energy sources. In fact, the Chinese Cuisine Training Institute has already adopted electric cooking equipment in teaching their students various Chinese dishes," notes Dr Chu.

HK Electric has also been able to persuade a number of Chinese restaurants in Hong Kong to do without their old gas burners, as K K Lee, Managing Director of the Ho Choi Restaurant Group confirms.

"Consumption of various fuels was large in the past," Mr Lee explains. "After switching to electrical equipment we can save energy, raise the restaurant's productivity, and meet the requirements of environmental protection.

"The expert advice of HK Electric on the choice of electric kitchen equipment has enabled us to achieve a much lower overall operating cost, and working in the kitchen is more comfortable. This new generation of environmentally-friendly electric kitchen equipment should be adopted in this new era."

Induction equipment is also a logical choice for open kitchen environments, in which diners observe the chefs preparing their food. According to Chef Yuen, a considerable number of hotels now use induction heads on the egg-cooking stands of their breakfast buffets, while Dan Leonard, Food Hall Manager of GREAT, considers the equipment ideal for chefs to use in the food hall.

"The design of the GREAT food hall in Pacific Place is unique and modern, and the open kitchen style is adopted. A clean, hygienic quiet, smoke free and grease free environment is required in order to let customers dine peacefully. Electric equipment can solve all the problems and deliver a modern hygienic feeling," he says.

Chefs may need some persuading to swap their old fashioned gas burners for electromagnetic heat, but once the switch has been made, according to Chef Yuen, who has also installed induction cooking equipment in his home, few will want to go back to the time-honoured methods.

"Some chefs are conservative," he says. "After all, all food was cooked originally with flame, but I've shown friends who are chefs and who have been convinced. Converting kitchens can involve major renovation work though, so there is also a certain resistance for that reason. It's the way of the future, but it will take time."

