

# Kitchen facilities essay sample



**ASSIGN  
BUSTER**

During the last fifty years, most designers were building on three types of kitchen layouts: the L-shaped kitchen, the U-shaped kitchen and the gallery kitchen. The gallery layout was very suitable for small kitchens. All these three layouts had one thing in common: the work triangle concept. They all placed the three main kitchen components (the refrigerator, the stove and the sink) in a triangular position.

### Modern trends

Another research study conducted more recently showed that the trends have changed. Nowadays, most women are working outside the house. Men started get involved in the cooking process. Most people use semi-prepared food and need to store about 800 items. These conclusions led to new trends in kitchen designs to respond to the changes in house working trends.

Modern kitchen layouts focus on multiple working centres. The standard designs don't allow for more than one person to be working in the kitchen. In order to allow multiple work stations inside the kitchen, designers have come up with the idea of an island layout. In this layout, the counter top is placed in the middle, thus providing up to four small work stations. These can turn into major work stations if you add an extra sink or set the cook top into the island.

However, you can make more work stations even without an island, by placing the cook top and the microwave oven in opposite parts of the sink. This way you can make counter space for two people to cook food each at one appliance.

## Finish materials

### Flooring

Floor styles include sheet vinyl, ceramic tiles and wood. The old linoleum is definitely out of fashion. Sheet vinyl, however, is a popular choice for moderately priced kitchens. Ceramic tiling is more popular for high-end kitchens, while wood floors are becoming popular in both moderate and high priced kitchens.

### Kitchen sinks

Sinks come in a wide range of materials and shapes: solid surface, stainless steel, cast iron or plastic, top-mounted or under-mounted, single-bowled, double-bowled, shallow or deep. They also vary in finishes: brushed nickel, chrome, stainless steel or polished brass. You should choose the model that responds to your needs but also fits your price range.

### Cabinets

Cabinets come in two styles: the European style (with no frames) and front-framed. They can be ordered from cabinet makers or stock supplies. They can be built from various types of wood, have different door styles and finish options. They also vary in the construction quality so you should be very careful when you choose them.

### Countertops

You can choose from a wide range of counter tops available on the market. Solid surface or granite countertops are very resistant, but also very

expensive. Tiles and laminates tops are still attractive, but less expensive and allow a do-it-yourself approach.

## Appliances

The first choice you will have to make is whether you prefer a built-in or free-standing style, as this is a decision that will affect the whole kitchen design.

The refrigerators can be either side-by-side or units and have top or bottom mounted freezers. Other choices involve smooth-top or halogen cook tops, microwave ovens, trash compactors, down-draft vents and range hoods.

Measure your kitchen carefully before making any decisions. If you're unsure, you can browse online catalogues for ideas or visit home design showrooms. Some home design websites feature applications that allow you to build your furniture from the grounds. However, a customized kitchen layout is more likely to suit your needs rather than a standard kitchen set.

## Types of Kitchen Layout

**Single Line Layout-** places all of the kitchen components in a single line against a straight wall. Components like the sink and stove are best situated in the middle of the single line layout to prevent having to walk from one end of the kitchen to the other while working.

## L-Shaped Layout

\* The two walls of the “ L-shaped” kitchen layout create a triangle of work space and help to keep the kitchen free of outside traffic. \* It gives you the ability to place more equipment in a smaller space.

### U-Shaped Layout

\* Layout uses three walls to create a “ U”, maximizing kitchen space and providing an abundance of counter space to work with. \* Advantages are that the distances bet the appliances are relatively short and they provide ample workspace and storage space.

### G- Shaped Layout

\* Adds a shorter wall to the three walls of the U-shaped layout, creating even more workspace and further limiting outside traffic to the kitchen area. \* Ideal for larger staffs needing extra storage space. Plenty of counter and cabinet space. \* Multiple cooks can function well in this layout.

### Galley Layout

\* Layout utilizes two rows of working space, making it easy to move from one station to the next. \* The sink, dishwasher and stove should be located on the same side of the kitchen and the refrigerator (the preparation zone) should be on the opposite wall. \* This layout is not recommended if other rooms are accessed through the kitchen.

### Island Layout

\* Central workstation provides extra space for performing various culinary tasks. \* Depending on the preferences of the cook, the island can be designed for their preparing or cooking meal. \* It is best used in large rooms that allow enough space between counters and islands.

### Types of Institutional Foodservice Equipments

\* RANGES AND OVENS

## THE RANGE TOP

Most heavily used piece of equipment in any kitchen is the range top. It allows us to boil, sauté, simmer, braise, deep-fry, and hold food hot.

There are three basic types of ranges, each one suited to different types of kitchen operations: the medium-duty restaurant or café range, the heavy-duty range, and the specialty range.

1. Medium-Duty Range- This multipurpose appliance is also known as a restaurant range or café range. It generally measures from 36 to 60 inches in width. Its range top contains 6 to 10 open burners, which are 12 inches square and arranged two deep across the top of the range. As its name suggests, this type of range is suggested for smaller establishments with short-order menus or in settings where there is no need for constant, continuous use, such as church or nursing home kitchens.

2. Heavy-Duty Range- similar to the medium-duty range but is made of heavier materials to withstand the rigors of high demand, and large, heavy pots and pans. is best suited for long hours and high-volume cooking. Its four open burners are rated up to 30, 000Btus per hour, per burner—able to cook hotter and faster than the 20, 000-Btu (British thermal unit) output of the café range burners.

### 3. Specialty Ranges

a. Stockpot range- A short range with a large open burner used to heat stockpots; also found in bakeries, where it is handy for melting chocolate. The range-top burner is a series of concentric rings, concentrating the heat at the center of the burner with a gradual heat decrease toward the outer

perimeter. b. Taco range. Designed for Mexican restaurants. Pans and pressure cookers fit into its recessed burners. c. Wok range. Also called a Chinese range. As you probably know, a wok is a bowl-shaped cooking pot used to cook foods quickly in Asian cuisine. This range features recessed, circular burners with rings that can be adjusted to accommodate large woks for stir-frying under very high heat conditions, up to 106, 000 Btus per hour d. Tabletop range. A partial range top that consists of two burners. It is used where space is at a premium. The burners can be situated side by side, for a depth of 16 inches, or front and back, for a depth of 28 inches. The 12-inch burners have a normal heating capacity of 20, 000 Btus per hour.

Rectangular Hotplates- These are 12 by 24 inches wide and are capable of temperatures ranging from 250 to 850 degrees Fahrenheit. Their heat controls can be either so-called infinite heat knobs, which allow for small adjustments, or standard low medium-high knobs. Because they're made of solid, one-inch thick cast iron, rectangular hotplates respond slowly to temperature changes.

French Hotplates- These are smaller (10 inches in diameter) and lighter in weight than rectangular hotplates, but the " burners" are solid, not coils. Made of iron, they are typically used for medium-volume cooking and à la carte-style cooking.

High-Speed Surface Units- These are a type of French hotplate with a kick, so to speak. They're designed for practically instant heat (within two minutes) and quick response to temperature adjustments, and yet their power usage is still a modest 2100 to 2600 kilowatts per hour. High-speed surface units

are tubular in shape, eight inches in diameter, and supported by a rugged 10- inch ring.

Electric Induction Range Tops- This type of range is also highly efficient, using less energy than either its gas or traditional electric counterparts. However, they work only when the right kinds of cookware are used. In a word, it must be magnetic. Most steel and cast iron pans are fine, but those made of aluminum, copper, and some types of stainless steel are not magnetic and, therefore, will not work on an induction range top.

Deck or Stack Ovens- An oven manufactured with more than one cavity and set of controls

a) Traditional-style deck oven- Each individual oven is either 8 inches high (for baking) or 12 inches high (for roasting) and, as we mentioned, can be stacked. The smallest ones hold two half-sheet pans (each 13 by 18 inches); the largest hold eight full-size sheet pans (each 18 by 26 inches). b)

Motorized, convective deck oven- A single baking cavity is equipped with three separate, horizontal baking hearths, made of perforated, nickel-plated steel. This oven has a reversing fan system that circulates air evenly and enhances its heat transfer capabilities. c) Vaulted deck oven- A single baking cavity has a larger, arched opening that provides easy access. Some have a secondary burner located under the oven cavity to increase baking speed. d)

Turntable deck oven- the largest of the deck oven family stands more than six feet tall, with 3 or 4 horizontal, rotating, circular baking decks with diameters of 48 to 56 inches perhaps made of ceramic (“ stone hearth”).

Multiple access doors maximize its efficiency.



## CLEANING AND MAINTENANCE

The very purpose of an oven is to put out a lot of heat, so it is important that the vents to dissipate that heat are always kept clean and free of debris.

Overdone or underdone food often signals that airflow is somehow being blocked. It may be as simple as moving the appliance out farther from the wall so that airflow around it is not restricted. Pilot lights and gas connections should be checked on gas-powered models, and wiring on electric models. Periodically check the doors, to make sure their seals are tight and that they are closing correctly. Otherwise, you are probably wasting heat that escapes through a misaligned door. Cleaning your commercial appliances is as easy as cleaning your dishes. Most equipment surfaces are made of stainless steel, which resists corrosion and is practically unharmed by moisture, detergents, food acids, salts, or anything else corrosive. These are solid sheets, not just a coating or surface that can be chipped off.

### Fryers

a) Gas Fryers- Gas-fired fryers are heated in one of two ways: with an atmospheric burner (which mixes air with gas to ignite a flame) located under the frying kettle, or by injecting the gas flames through tubes located along the bottom or sides of the kettle. These tubes contain flame slots, or baffles, which aim the flames for maximum heat distribution and efficiency. Also, gas fryers contain a fryer screen that separates the cold zone at the bottom of the kettle from the rest of the oil. The fryer baskets rest on the screen, above the burner. b) Electric Fryers are usually tube-type fryers, with heating elements contained in stainless steel tubes immersed directly in the

oil. This makes them very energy efficient. The amount of the element that comes into contact with the oil is important; more surface area contact heats faster and minimizes heat recovery time. c) Automated Fryers Computer-controlled fryers can be programmed easily to turn out consistent product every time, regardless of the size of the batch. They take a lot of judgment out of the frying process, which can mean better product consistency, less waste, and less time spent having to train employees to use them.

Pressure fryers provide some of the most versatile and profitable cooking applications, available for use in small spaces. This specialty appliance cooks food with a combination of hot oil and steam. The steam may be generated from moisture in the food, or it may be added during the cooking process. The pressure fryer is basically a fryer with a tightly sealed lid, usually a rubber gasket.

Pasta Cookers- It's a kettle seated in a cabinet that is similar in construction to the fryer kettle. It comes in both electric and gas-powered models, and is designed to cook, rinse, chill, and reheat—a system tailor-made for perfect pasta. The two-tank cooker looks like a two-kettle fryer. On one side, pasta is cooked in bulk in stainless steel baskets; on the other, it is reheated in convenient portion-size plastic baskets.

## BROILERS

Overhead Broiler- refers to the fact that its heating element is located above the food being broiled. It is a heavy-duty piece of equipment designed for high-volume output. In the typical battery of commercial kitchen appliances, it is installed beside the range. It measures the same width and height as the

range. A big advantage of this type of broiler over other types is the separation of the radiant heat source from the drip pan at the bottom of the broiler

Char broiler- Charbroiling is the term for broiling food with flames, smoke, and radiant heat. It is popular in display kitchens, because it's showy and fun to watch, but charbroiling also imparts a nice, charcoal flavor to the food

### SPECIALTY BROILERS

a) Salamander- A miniature version of the heavy-duty broilers, it measures from 10 to 13 inches deep and from 23 to 28 inches wide. It's small enough to rest on a shelf or counter, or it can be mounted directly above a range or spreader plate b) Cheesemelter. The cheesemelter is another type of specialty broiler. Its name explains its most common use: to melt cheese, primarily on Italian, Mexican, and Tex-Mex dishes. While it accomplishes that task quite nicely, it can also be used to brown, poach, and boil. However, its primary function is to “ finish” food, not cook it, so cheesemelters often have lower overall heat output than salamanders.

c) Conveyor Broiler. For maximum cooking speed, a conveyor broiler includes both under fired and over fired radiant. Food is placed on a stainless steel conveyor belt; in some units, the food is loaded onto the belt at the front and emerges fully cooked at the back; others are frontload and front-return. These broiler types cook faster because foods are exposed to both top and bottom heat

Rotisserie- A rotisserie is an oven-like machine that slowly rotates meat, fish or poultry on a rod over heating coils until cooked. The machine cooks the

meat slowly and keeps it from drying out. The food does not have to be basted or turned as in a regular oven.

**GRIDDLES-** a piece of surface cooking equipment, a flat-top appliance on which food is heated from below by gas or electric heating elements located directly under the flat surface

#### SPECIALTY GRIDDLES

a) Heavy-duty Griddle. A variation of the floor-model griddle is the heavy-duty griddle with an oven below. It's considered heavy duty because its gas burners are rated at 30, 000 Btus per hour. Sometimes, it's referred to as a fry-top range b) Steam Griddle. In recent years, at least two manufacturers

have introduced steam technology to griddles. When water is heated under pressure—in this case, in a sealed chamber beneath the griddle plate—it creates superheated steam with a temperature of up to 400 degrees

Fahrenheit. Since steam produces amazingly even heat, the temperature does not vary more than two degrees anywhere on the plate. This eliminates hot and cold spots and allows foods to be cooked closer together c)

Clamshell Griddle. The clamshell griddle is a unique piece of equipment that cooks food on both sides simultaneously, therefore reducing cooking time by half. d) Panini Grill- Sometimes called a sandwich press, it is versatile enough

to use with breakfast items, flat breads, Reubens, and other sandwich types as well Most panini grills are countertop models that do not require special ventilation. There are multiple combinations of flat or grooved surfaces for top and bottom platens that can heat up to 570 degrees Fahrenheit.

Restaurant Kitchen Equipment Information

A restaurant kitchen must have the proper equipment to prepare the dishes on the menu properly. While it's possible to use equipment available to the general public, commercial-grade restaurant equipment can stand up to the rigorous usage demanded of it over the long term. Professional-grade kitchen equipment typically outperforms its non-professional counterpart, which means it needs replacing less often.

### Quality

The decision to purchase name brand, new restaurant cookware or appliances is entirely up to the owner. However, a name brand doesn't always mean a quality product. Every type of kitchen equipment has buyer's guides created by experts. While the goal of some buyer's guides is purely to make sales, others have valuable information about the quality of a product. Commercial-grade kitchen equipment should withstand extreme hot and cold conditions, be heavy gauged if metal and easy to sanitize. If the equipment malfunctions due to poor quality, restaurant business may suffer.

### Types

There are many types of restaurant kitchen equipment. The cooking and refrigeration appliances are the largest and most expensive to own and operate. Cleaning equipment is essential to passing health inspections. Restaurant cookware cooks the meals on the stove or in the oven. It's also part of the preparation and serving of the meals. Smaller appliances do specialized tasks such as mix food or warm it.

### Costs

The restaurant should have a budget. Purchasing kitchen equipment doesn't

have to be a budget buster. Once an inventory of equipment is available, it's a simple matter of figuring out what pieces of equipment are necessary to operate the restaurant, and then purchasing them at the lowest cost for their worth. For major appliances, newer, energy-efficient models make more sense to purchase than used models that cost more to operate.

### Considerations

With all the many pieces of kitchen equipment on the market, it's easy to want to put each appliance or tool in the restaurant's kitchen. This can be a big mistake. Too many appliances, especially those not necessary for the preparation of food on the menu, only take up space. Generally speaking, it's wiser to have a few good, multi-function pieces rather than many lesser-grade ones.

### Warning

Don't purchase any major appliance for the restaurant kitchen without first checking with the local city codes administrator, health inspector and fire codes administrator. They are knowledgeable about potential problems caused by any piece of kitchen equipment. Also, make sure the restaurant has sufficient electrical power to operate any equipment. This includes electric appliances such as microwaves, blenders and grills.