

Dishwasher Basics



Swish®

Dishwashing machine technology automates part of the warewashing process so kitchens can operate more efficiently, and ensure high standards of cleanliness and sanitation. They come in many configurations, and there are special machines for glassware and high-volume facilities.

DISHWASHER STYLES

Upright Door-Type Machine With A Single Rack

The upright door type is one of the most basic yet practical designs, which allows you to load the dishes outside and then push the rack into the machine. They offer faster loading, and their run times are typically shorter, 60-90 seconds instead of 2-3 minutes with under-counter styles.

- More vertical space for more oversized items
- Smaller footprint than conveyor units

Under-Counter

Under-counter dishwashers are best for smaller spaces and lower volume establishments because they take longer to run as wares must be loaded directly into the machine (rather than stacking the rack outside and then feeding it in).

- Space-saving
- Versatile for a variety of wares

Flight Machines Or Multi-Tank Conveyors

These are high-performance dishwashers for the busiest kitchens that can wash up to 20,000 dishes per hour. Staff place dirty wares onto the conveyor, which passes through a curtain and comes out sanitized on the other end. They are best for high-volume facilities with a constant supply of dirty wares, like hospitals, cafeterias and banquet halls.

- Sterilize high volumes of wares
- Require a lot of floor space
- Require high voltage and use a lot of electricity

Dishwasher Basics

The Swish logo is written in a white, cursive font on a red, rounded rectangular background.

Rotary or Carousel/ Circular Glassware Machine

Glasswashers are perfect for establishments that serve many drinks in a short period, like bars or banquet halls, as they avoid chipping delicate glassware. Rotary-style machines are a hybrid of a rack and flight-type dishwashing machine.

- Less glass breakage

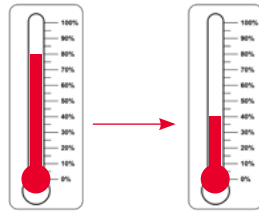
Ventless

If your facility does not currently have ductwork installed, installing a ventless dishwasher will be more cost-effective. In addition to venting installation costs, you must consider ceiling heights and kitchen dimensions. Some ventless machines will cool, condense and discard the water, while others recycle the hot steam to heat the next cycle.

- Eliminates the need to install hoods and ductwork



Dishwasher Basics



Swish®

HIGH-TEMPERATURE V.S. LOW-TEMPERATURE

Dishwashers also differ in one fundamental way; temperature ranges and, therefore, the sanitation method they use. While cleaning removes the food and debris, sanitation kills the pathogens and bacteria.

High-Temperature

High-temp dishwashers use sustained heat (140-160°F) and boost the heat to 180°F or higher on the final rinse to sanitize. They do not require sanitizing chemicals. Some models need a vented hood to pull away excess moisture, which requires space and installation costs.

Other brands offer ventless machines.

- Suitable for grease and hard-to-clean food
- Better sterilization without chemicals
- Dishes dry faster
- Higher upfront costs

Low-Temperature

On the other hand, low-temp machines rely on chemical sanitation for the final rinse, typically ammonium (Quats) or chlorine. They are generally less expensive and more energy efficient. The wash solution is dumped at the end of the wash cycle, then refilled with the sanitizing solution and rinse aid. They generally cost less upfront and are often available on 120V power.

- Lower electric running costs
- Risk of damage to certain materials due to chemical sanitizers
- Less effective on hard-to-clean foods

Dishwasher Basics



Swish®

WHICH TYPE OF DISHWASHER IS RIGHT FOR ME?

Deciding on which type of dishwasher depends on a variety of environmental factors, including:

Space

Think about the limitations of your kitchen space versus the volume of warewashing you will do. Most machines have a lifespan of 5+ years, so it's also economical to think ahead to projected volume.

Type Of Food Soil

Not all food waste and debris are the same. High-temperature dishwashers tend to clean greasy foods better the first time. Alternatively, you can use low-temperature styles but must invest in the right chemicals that break down oils.

Total Dissolved Solids

The minerals in your water supply can change the effectiveness of detergents, and rinse aids can cause more issues at high temperatures.

Energy Star Ratings

A new energy star-certified dishwasher will save on average 3,870 gallons of water and \$19,000 on utility bills over its lifetime. Look for manufacturers with the cyan blue and white Energy Star symbol.

Type Of Menu

Do you tend to serve more high protein, fried foods? Then you should opt for a high-temperature machine. Do you serve food or drink that are delicate in flavour? The low-temperature sanitizer could affect the flavours.

Utilities

Electrical, incoming water, and ventilation play a part in the dishwasher selection process as the equipment has different requirements. High-temperature machines require 208V-600V, and the water is heated through a booster to reach the necessary 180°F sanitizing temperature. With this higher heat, the kitchen will require ventilation to keep the steam and environment in comfortable conditions for the staff. Low-temperature machines have a lower electrical need as they use chemicals for sanitization - the key here is to ensure the incoming water is at the proper temperature for the wash; refer to the dishwasher specification sheet for information. If the incoming water does not reach the temperature for the low temp unit, you may need to add a temperature-sure booster.