

 West Lothian Council	Environmental Health		SUBJECT: Dish Washers
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STATUS: TRADE ADVICE		Public Health	KEYWORDS: Cleaning Dish washers
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		Pest Control/Dog Warden	

Information Sheet FH24

Dish Washers

Introduction

It is now much more common to consider using a dishwasher in catering businesses. They often produce better results than hand washing, and in the long run can save a lot of staff time and therefore money. But like any other piece of catering equipment they need to be considered carefully.

If your business handles both raw and ready to eat foods in the same premises, then the guidance from the Food Standards Agency is that washing up and disinfection is best carried out in a dishwasher, the disinfection being carried out by heat not chemicals.

Domestic or Commercial Types?

- Commercial dishwashers are often more expensive than household models. This reflects the different uses for which the equipment was designed and the length of time needed to wash the dishes. But buying a cheaper model can be a false economy. Consider these points: -
 - Will it reach a time / temperature combination sufficient to disinfect?
 - A domestic dishwasher cycle will take up to an hour and a half. Can you afford to have equipment out of use inside the machine for that long?
 - Domestic dishwashers are normally designed to take 8-12 dining place settings, excluding the cooking pots etc used. Is this enough for your size of operation?
 - Can you get your larger equipment in, or will it still have to be hand washed?
 - Will it withstand use several times every day? Home dishwashers are normally designed for use only 1-2 times a day.
 - For how long will parts be available? Domestic models change regularly.

If the answers to these questions are satisfactory, then a domestic type dishwasher may be all you need. If not, you need to read on.

Types of Commercial Dish Washers

Commercial dishwashers come in two main designs: 'front loading' and 'through flow'.

- Through flow machines are best for higher volumes or where the machine will have to be loaded and unloaded several times in quick succession. They normally have stainless steel worktops on each side to allow loaded trays to be slid into the machine from one

side, and removed on the other. Additional trays can be stored underneath the worktop until needed. Often the 'input' side has a spray head attachment to allow loose food waste to be rinsed off before washing. This allows trays to be filled and emptied whilst others are in the machine itself. Advantages include reduced handling of equipment, good use of staff time, and minimal spillages on the floor. Cycle times are often less than 5 minutes for a full load.

3. Front loading machines work similarly, but need operators to lift trays in and out of the machine. These machines take up less space, as they don't need the stainless steel worktops to either side, and they are often cheaper than through flow machines, but they also have some disadvantages:
 - They take up more working floor space as the trays have to be loaded in and out
 - Large-scale spillages of food debris and water on the floor are likely. This means more floor cleaning is needed and there is an increased risk of staff slipping.
 - To avoid back strain on staff, the weight which can be placed on each tray has to be limited
 - A stand is usually needed to reduce the risk of staff damaging their backs whilst loading and unloading.

Cleaning Materials and Water Supply

4. Commercial machines normally operate from liquid cleaning chemicals. These can be designed for each manufacturer's machines and are therefore may not be interchangeable. Bear in mind that:
 - There will need to be somewhere very close by to locate the cleaning chemical containers which supply the machine
 - These chemicals are often corrosive and need very careful handling
 - The chemicals are prone to drying or crystallisation if the machine is not used very regularly, in which case a powder or tablet dosed machine may be more effective.
5. Dishwashers operate with very hot water, which has to be heated. If you have a good supply of hot water, a machine, which takes a hot water feed, is a good idea. Remember that if a cold water supply is used, the cycle time will be longer to allow the water to heat up first.
6. The cleaning chemicals used are often corrosive and need to be handled with care. Because they are corrosive, equipment with cast aluminium and zinc parts should not normally be put through a dishwasher, as they become rough and pitted. Examples include some pots, slicing machine components and some ice cream scoops. Check the suitability of your equipment for machine washing with your suppliers

Location / cleaning

7. Dishwashing should, as far as possible, be sited away from food preparation areas. An Information Sheet on kitchen layouts is available from us, which covers this in more detail.
8. Some through-flow machines have very poor splash backs behind the rinsing areas. The gap between the machine and the wall then allows water and food debris to go down behind the machine, where it is very difficult to clean. Make sure that no debris will be able to get down behind your dishwasher by installing a high splash back.

Ventilation

9. Dishwashers can generate large quantities of steam because of the hot water used. It is a good idea to have a canopy above to collect the steam released. This can have a fan or simply just allow the moisture to condense in a controlled area. An Information Sheet on ventilation is available from us, which covers this in more detail.

Some modern equipment condenses and collects its own steam and this should be selected if at all possible.

Other facilities

10. No dishwasher is 100% reliable. Therefore, we always strongly recommend that kitchens also have double sinks large enough for the largest equipment; so that you can still wash up properly even if the dishwasher fails. Remember to have suitable and sufficient chemicals available in case the dishwasher breaks down and dishes have to be washed and disinfected by hand.

Further help

Remember it is your responsibility to ensure that the food served to your customers is safe. If you would like help, or need any further advice, then please contact us on 01506 280000 or environmentalhealth@westlothian.gov.uk

A wide range of Information Sheets are available to help businesses to understand and comply with the law.