8
Waste disposal

More household waste is generated in the kitchen than any other room. Most is produced near the sink and dishwasher which is the logical place to position waste bins.

Recycling waste

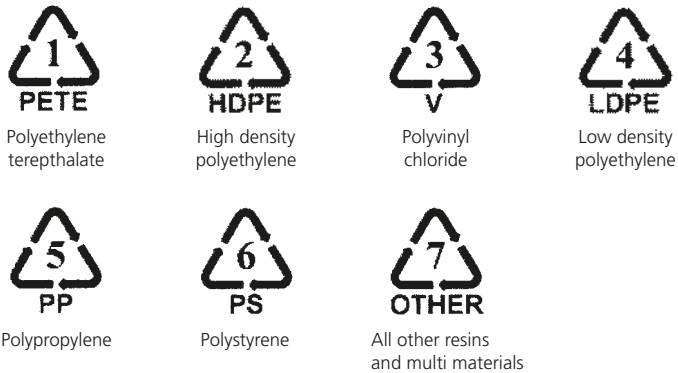
A good deal of waste can be recycled.
Many local authorities will collect the following items providing it is clean and separated for recycling:

glass, aluminium and tin cans, paper and also plastic containers if they are marked with the triangular recycle logo.

For households with a garden, organic waste can be put on a *compost heap.* This can include all vegetable waste, egg shells, tea bags, etc., but should NOT include bread, meat or fat which will encourage rats.

'Mobious Loop'
a recycling logo
in general use

Recycling logo from DEFRA
(Dept. for Environment Food
and Rural Affairs) with different coloured grounds for
different types of waste



Recycling logos for plastic materials

Waste bins

In an ideal world, kitchen waste would be separated into six bins as follows:

vegetables, teabags, eggshells	for compost heap
metal cans	for recycling
glass	for recycling
plastic	for recycling
paper	for recycling
anything else	for dustbin

This is obviously difficult to achieve especially when space is at a premium.
However, even the smallest kitchen should have at least three bins: one for general rubbish and two for metal and glass.

There are various proprietary systems for fitting waste bins into cabinets such as:

Pull-out rectangular bins suspended on runners with combinations of two, three and five bins, depending on cabinet width.

Bins fitted to insides of doors with lids opening automatically as doors are opened.

Tall bins to fit 300 mm wide cabinets with pull-out or hopper doors.

20 litre SS round bin for side-hung door and 400 mm wide cabinet by Häfele

19 litre pull-out plastic bin for min. 300 mm wide cabinet by Isaac Lord

16 litre total capacity for two compartments in SS bin for side-hung door and min 450 wide cabinet – by Häfele

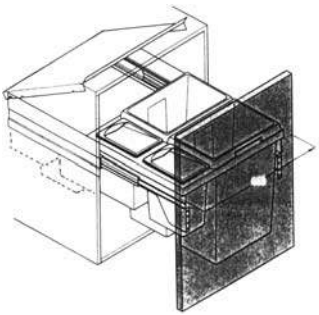
50 litre total in 3 bins and 2 baskets for pull-out door to 500 mm wide cabinet – by Häfele

30 litre total in three SS bins for pull-out door and min. 400 mm wide cabinet by Issac Lord

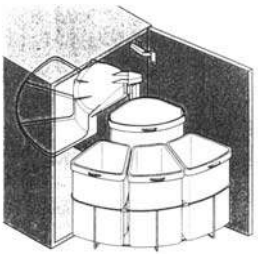
32 litre total in three SS bins for pull-out door and min. 500 W cabinet by Issac Lord

30 litre bin front-fixed to door with tilting mechanism for 500 mm wide cabinet by Häfele

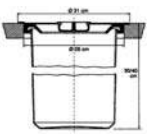
Wastebins



87 litres total in 2 × 35 litre bins and 2 × 8.5 litre bins hung on sides of 600 mm cabinet – by Häfele



39 litres total in 1 × 12 litre bin and 3 × 9 litre bins fixed to side and base of 500 mm wide cabinet by Häfele



15 litre (or 11 litre) plastic bin and SS lid fixed into worktop with soft rubber ring housed into SS ring which trims hole in worktop by Isaac Lord

Dustbins

Ideally, dustbins should be on the same level as the kitchen, with covered access not more than 18 m from the kitchen and 50 m from dustcart access.

For homes with solid fuel appliances, a metal dustbin will be needed for hot ashes.

In the same area, separate bins could be arranged to store glass, plastic and paper to be collected for recycling.

Waste disposers

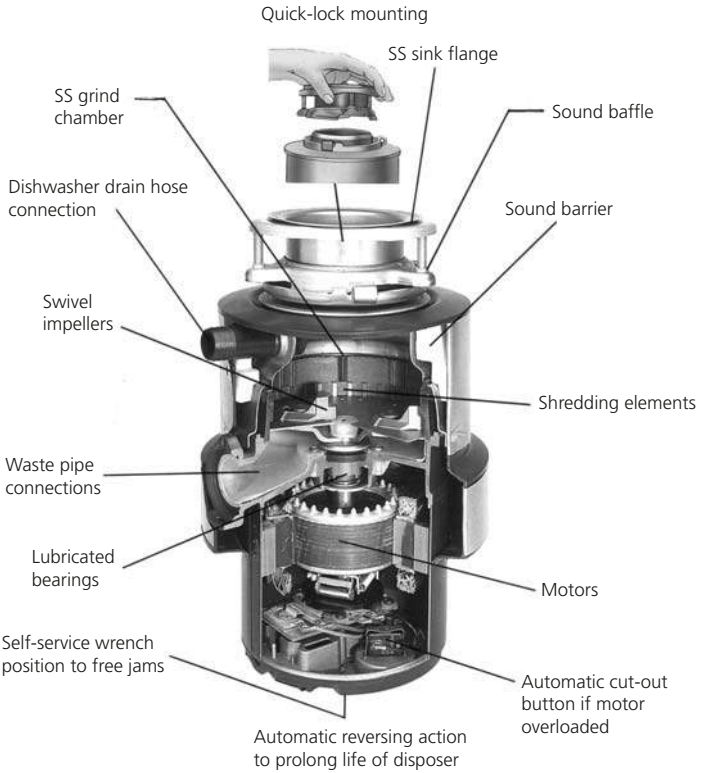
For households with a garden and a compost heap, a waste disposer in the kitchen may not be required.

Otherwise the arguments for waste disposers are as follows:

- useful in multi-storey flats where storage and collection of waste is a problem
- eliminates handling of wet leftover food
- prevents smells as food is flushed away promptly
- more hygienic as rotting food in bins encourages smells, bacteria, insects and rodents
- reduces the amount of waste that ends in landfill sites
- resulting sludge at water treatment plants can be recycled into soil conditioner.

Arguments against waste disposers are:

- only deals with 15% of total household rubbish
- uses 9 litres of water per head per day so will add to water bills
- increases sludge in sewers.



Continuous feed waste disposer – by In-Sink-Erator

Models

There are two types of waste disposer:

continuous feed	turn on cold water tap, switch on and push food through sink waste under running water
batch feed	place waste in unit, insert plug which seals unit, run water and turn plug to activate motor

Continuous feed models are more convenient to use especially when there is a great deal of waste.
Batch feed models are safer as it is not possible to touch the grinders when running and are essential where small children are around. As there is no need for a wall switch batch feed types are quicker and cheaper to install. They are also quieter than continuous feed models.

Waste disposers will deal with most food waste including: chicken carcasses, meat, fish eggshells, etc., but can jam on large bones and very hard fruit stones.
They must not be used for packaging materials such as: metal, plastic, rubber cloth, wool, glass, ceramics and string for which alternative bins will be needed.

There are different sizes available from $\frac{1}{2}$ to $\frac{3}{4}$ horsepower with guarantees from 2 to 10 years which is reflected in the price.

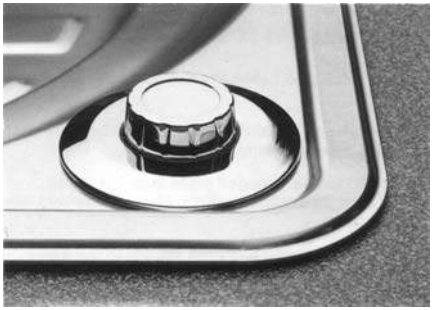
The most powerful models with the longest guarantees are the most expensive.

Size range from: 320–450 mm high × 150–230 mm diameter.

Some continuous feed models can be activated by *air switches* which can be fitted into the sink top or the surrounding work-top. They operate by pushing a button which sends a pulse of air to a microswitch which turns on the current at the socket positioned below the sink.
These can be used with wet hands with complete safety as there is no contact with the electric current.

Some models are fitted with an *automatic reversing switch* which prevents jamming and overheating.

Other cheaper models have a *reversing switch* which is useful if jams occur.



Air switch set into sink surround

Air switch with under-sink components for a waste disposer – by In-Sink-Erator

Installation

Waste disposers should not discharge into cesspits nor into septic tanks of less than 2250 litres capacity.

They should never be run with hot water as this can cause grease to melt and line waste pipes.

Waste disposers need a 90 mm diameter sink waste outlet with a minimum 38 mm waste pipe connected to a P or S running trap (NOT a bottle trap) and be run with a minimum fall of 1:7 to ensure adequate flushing. The waste pipe should be taken directly to drain, with no other waste connections, in the shortest distance possible.

Some local authorities may ask for a 50-mm waste with an access gully or a stub waste and cleaning eye.

They use little electricity and require little maintenance but are noisy when running, increasingly so with age.

Refuse compactors

Domestic rubbish compactors are designed to compress all kitchen waste including empty cans, glass bottles and cartons. The compactor applies about $2\frac{1}{2}$ tons of force to compress everything down into a small tough plastic bag.
These packages take a very long time to decompose and could well become a problem for landfill sites.
Nowadays they are of doubtful domestic use as more and more local authorities are able to recycle separated waste.

They will fit under a standard worktop and are typically:

810 high × 510 deep × 310 wide mm.

Refuse Compactor with SS fascia and door front or can be supplied with fascia panel to match kitchen decor.
310 mm wide for building into standard kitchen cabinets by In-Sink-Erator

Sources: In-Sink-Erator, Tweeny