

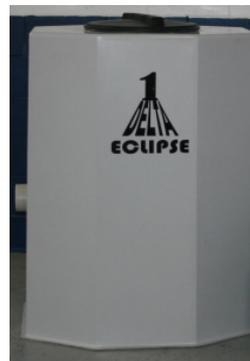


Delta Grease Arrestor Product Manual

Delta 2



Delta 1



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INTRODUCTION.

The Delta grease arrestor is a highly efficient device for the removal of grease and solid matter as may be found in all commercial cooking and food preparation areas.

The Delta is fully protected by Australian and overseas patents.

The Delta is fully Australian made and Eclipse Environmental is Australian owned.

The Delta 1 has several unique features:

These are:

1. Extra solids capacity or higher throughput.
2. Internal fillet curves give extra strength for below ground installations.
3. Compact octagonal shape for greater versatility and against the wall mounting.

The method of operation consists of two actions:

1. Food particles larger than 1.2 mm will not pass through the cartridge. These are
 - a. either trapped or
 - b. sink to the bottom taking with them adhering grease.

2. The oleophilic cartridge prevents oil and grease from passing through it.

Both these actions protect the sewer from the ingress of both suspended solids and oil and grease.

The compact nature of the Delta grease arrestor makes it ideal for retrofitting to older premises and allows the customer to relocate the unit without great expense.



APPLICATIONS.

Bakery	Kebabs
Boarding house	Motel
Butchers	Nightclub
Cafe	Nuts
Cafeteria	Pasta
Canteen	Patisserie
Cheese Cake Shop (made on premises)	Pavlova
Chicken shop	Pies
Child Care Centre	Pizza
Club	Restaurant
Coffee shop	School Canteen (cooking)
Science Commercial kitchen	School Home
Community Hall	Seafood
Defence Force Mess	Service Station Forecourt caravan
Delicatessen	Ship to Shore (galley waste)
Dessert shop	Soup Kitchen
Fast food shop	Take away Foods
Fish and chip Shop	Yeeros (Yiros)
Hot Bread	Function Centre
	Hotel

Delta 1 suitability guide.

Restaurant with no more than 70 settings

Takeaway shop with less than 8 employees at any one time. Fast food outlet where most of the food is already prepared.

Delta 2 suitability guide.

Restaurant with no more than 120 settings

Takeaway shop with less than 12 employees at any one time. Fast food outlet where most of the food is already prepared.

Flow rates:

The Delta 1 has a maximum daily volume of around 2000 litres. The Delta 2 has a maximum daily volume of around 3000 litres

Further requirements.

A dry basket arrestor is necessary if floor wastes are in food preparation and handling areas. Trade wastewater must pass through the grease arrestor.

NB. Sink strainers must always be in place. Failure of the equipment can result and voiding of any warranty will result if this condition is not met.



SPECIFICATIONS:

Delta 1.

colour	light grey
tank material	FRP (min 8 mm thick)
internal structure	FRP
lid	450 mm diameter polypropylene with gastight
seal weight / volume	34 kg empty / 500 litres
pumpout volume	500 litres
dimensions	900 length 600 width 1200 high

fittings

inlet	100 mm swd upvc
outlet	100 mm swd upvc
vent	100 mm swd upvc

Delta 2.

colour	light grey
tank material	FRP (min 8 mm thick)
internal structure	FRP
lid	450 mm diameter polypropylene with gastight
seal weight / volume	45 kg empty / 700 litres
pumpout volume	700 litres
dimensions (mm)	1200 length 600 width 1200 high

fittings

inlet	100 mm swd upvc
outlet	100 mm swd upvc
vent	100 mm swd upvc

Quality Control for the manufacture of the fibreglass tank.

Resin type: Isophthalate laminating resin conforms to the following criteria.

	Test method	minimum	maximum
Cone and plate viscosity (Poise at 25°C)	53-34-88	1.8	2.3
Brookfield viscosity, spindle 2 rpm	53-2-86	15	25
Gel time at 25°C	53-10-86	10	15
Exotherm to peak	53-11-86	25	40
Visible test	visual light blue colour with no		

lumps No laminating is carried out if ambient temperature exceeds 32⁰ C
 All resin mixes are carried out by using measuring vessels to arrive at the correct ratio.



INSTALLATION INSTRUCTIONS.

All installations should be carried out by a licensed plumber and comply with AS 3500.2 The Delta should be located so as not to impede access to persons and consideration be given to the maintenance requirements. Allow min 1.2 meters clearance above the unit for a (sludge judge) tester to be used.

There are many different installation methods available with the Delta .

These are

1. Gravity inlet and gravity outlet. (preferred option)
2. Pumped inlet and gravity outlet.
3. Gravity inlet and pumped outlet.
4. Pumped inlet and pumped outlet.

Each of the above combinations can also be installed above or below ground.

Surcharge point.

A gully or reflux valve must be installed downstream to protect the Delta from surcharge. Below ground installation only.

Outlet from Delta .

The outlet from the Delta must be trapped and have fittings with screwed inspection openings as per drawings.

Plumbing fittings and pipes.

PVC pipes are preferred but cast iron is acceptable. Copper pipes must not be used. Rubber adaptors are available for retrofitting PVC pipe to other types of pipes.

BELOW GROUND INSTALLATION OF DELTA 1.

1. Dig a hole with at least 200 mm clearance around all sides.
2. Make provision for the inlet and outlet connections and the vent pipe.
3. Ensure the base is prepared to AS 3500.2 with a 100 mm of concrete cover over compacted ground.
4. After the Delta has been positioned deposit a mixture of sand cement (10:1) around the base to stabilise it.

5. Partly fill the Delta to at least 500mm depth with water. This is important as the Delta will settle to its ultimate position.
6. Connect all plumbing now
7. Fill in the sides with a mixture of sand cement (10:1) and prepare the top area for the appropriate lid. (see note below, Trafficable lids)
8. If the Delta is in a non trafficable area the standard plastic lid will suffice.
The unit should protrude above ground level by 150 mm to stop the ingress of rain water.

Trafficable lids.

For trafficable areas a gas tight concrete lid (Gatic Lid) can be cast in place above the grease trap in accordance to AS-3669 and to the lid manufacturers instructions.

The lid should be installed so that no loading is placed directly on the Delta but bridges over it and is supported by the side walls of the filled excavation.

Lids are available with installation instructions from most concrete product suppliers. Minimum size should be 600 mm by 600 mm.

See diagram at end of manual.

ABOVE GROUND INSTALLATION.

1. The site should be level and able to support the weight of the arrestor when full.
A minimum 100 mm thick concrete slab must be used on open ground.
2. The Delta 1 may be partially filled with water to a height of 500 mm to stabilise it whilst plumbing connections are made.

PROTECTING AGAINST ACCIDENTAL DAMAGE AND VANDALISM

Suitable bollards should be positioned to stop motor vehicles from damaging the unit.

Steel posts typically 100 mm (dia.) and 1300 mm (high) should be positioned so as to stop any possibility of damage from a motor vehicle.

If the chance of vandalism exists a fence or cage should be installed.

INTERNAL INSTALLATIONS.

Upon permission from the relevant health inspector the Delta can be installed within the premises without the usual vented enclosure.

Consideration should be given to cleaning and maintaining the unit.

Remote pump out lines can be connected to the outside of the premises thereby making cleaning easier.

Fixed suction lines shall terminate with a camlock fitting and ball valve adjacent to the grease arrestor and also where there is appropriate access for the liquid waste contractor to park their vehicle.

Fixed suction lines shall not connect directly onto / into a grease arrestor.

VENTING THE DELTA .

The contents of the Delta are hermetically sealed to prevent odour escaping. Two vents are required to provide air pressure equalisation and the transfer of odour away from the unit.

Refer to the installation drawings at the back of this manual for various installation methods.

The inlet pipe is open to the internal volume of the Delta .

The vent pipe for the Delta is to be a minimum of 100 mm.

If the Delta is pump fed the connection from the pump line to the inlet plumbing must be via 100 mm pipe.

PUMPOUT LINES.

The pump out line can be fitted to within 1 m of the Delta . The final connection can be made at the time of the pump out service. This line is connected to the outside of the premises and fitted with a male camlock fitting and cover.

A plate can be used to mount the pipe or it can be cemented in place.

The length should be kept to a minimum with few curves and preferably no low spots for waste to accumulate.

Fixed suction lines shall terminate with a camlock fitting and ball valve adjacent to the grease arrestor and also where the pumping contractor locates their vehicles. Fixed suction lines are not permitted inside grease arrestors

50 mm pvc (class 12) pressure pipe or 65 mm (class 12) polypropylene pipe with no joints and sweeping curves is the preferred material for this pipe.

Consideration should be given to the parking requirements of the pump out truck.

WATER SUPPLY AT THE ARRESTOR.

A hose cock and hose are required for the washing of the Delta . These must be located within 5 m of the Delta .

The required back flow prevention device must be fitted.

Delta Maintenance instructions.

The Delta grease arrestor and under sink unit must be pumped out and cleaned within the agreed service period as set by your local Water Authority.

This period must not exceed 3 months and is indicated when about 90 mm of floating oil, grease or sludge is evident, with the initial pump out period being 60 days from installation.

Exchanging the cartridge reduces the onsite cleaning time.

Cleaning the Delta with filter cartridge replacement.

1. The lid is removed.
2. The cartridge and baffle are unscrewed in an anticlockwise direction and moved to one side.
3. The suction hose is put into the unit and the contents are sucked out.
4. The plastic baffle cylinder is then replaced and a replacement cartridge is screwed back in a clockwise direction (2 turns).
5. The lid is screwed back on.
6. The Delta is filled with water and returned to service

Cleaning Delta without filter cartridge replacement.

1. The lid is removed.
2. The cartridge and baffle are unscrewed and moved to one side.
3. The suction hose is put into the unit and the contents are sucked out.
4. The cartridge is removed and placed in a 60 litre bucket and cleaned
5. The plastic baffle cylinder is then removed and the internal surfaces are hosed.
6. The plastic baffle cylinder is then replaced and the cartridge is screwed back in a clockwise direction (2 turns).
7. The lid is screwed back on.
8. The Delta is filled with water and returned to service.

Cleanout contractor.

The cleaning and pumping out of the unit must be done by a licensed Contractor.

The contents of the Delta must be pumped out at the required frequency.

Regardless of whether fixed suction lines are in place or not, the above cleaning regime for the grease arrestor is still required to be completed

The Delta cartridge must be thoroughly cleaned or replaced with a clean cartridge and any undersink or rising main boxes must also be cleaned out at the same time.

The service must be carried out by a fully trained person.

Failure to the equipment can occur if the equipment is not serviced correctly.

IMPORTANT NOTE

The filter of the Delta Compact Grease Arrestor is an integral part of the equipment. The Delta compact grease arrestor must not be operated without a filter correctly in place.

This instruction sheet is mounted in the customer's kitchen.



GREASE ARRESTOR INSTRUCTIONS.

Make sure that all sink strainers are always in place.

DO NOT allow food scraps to go down the drain.

Always scrape plates and drain oil into collection drums.

BEGINNING OF DAY.

1. ALLOW 10 LITRES OF WARM WATER TO GO DOWN THE SINK.
2. CHECK TO SEE THE PUMP IS OPERATING (IF UNDERSINK UNIT FITTED).

DURING THE DAY.

1. ON BUSY DAYS CHECK THAT THE PUMP IS OPERATING CORRECTLY.
(IF UNDERSINK UNIT FITTED)

END OF DAY.

1. ALLOW 10 LITRES OF WARM WATER TO GO DOWN THE SINK.
2. CHECK THE UNDER SINK UNIT FOR EXCESS FOOD SCRAPS.
(IF UNDERSINK UNIT FITTED)

BLOCKAGES.

IF A BLOCKAGE OCCURS CHECK THAT THE PUMP IN THE UNDER SINK UNIT IS FREE FROM DEBRIS. (IF UNDERSINK UNIT FITTED)

ROUTINE MAINTENANCE.

THE UNDER SINK UNIT SHOULD BE PUMPED OUT AT THE SAME TIME AS THE DELTA.

FOR ANY PROBLEMS CALL **ECLIPSE** 1300 272 650

CHAPMAN HUTCHISON PTY LTD

30th March 2005

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Attention: Mr R. Laferla

Dear Sir,

RE: PRE-CAST PITS

As requested we have reviewed the structural capacity of one of your pre-cast pits when placed in the ground.

The pit reviewed was the Delta 1 pit, 0.9 x .6 x 1.2 deep made from minimum 8mm fibreglass.

As a result of our review we are prepared to certify that the walls of the pit can adequately withstand the loads imposed by the earth backfill with potential hydrostatic pressure around the pits when empty.

Should there be any questions please do not hesitate to contact the undersigned.

Yours faithfully
CHAPMAN HUTCHISON PTY LTD



B A HUTCHISON

