PORT CAPITAL PTY LTD

1,000L POLYMER - 6,000L POLYMER

GREASE ARRESTORS.

W.A PRODUCT INFORMATION, INSTALLATION & WARRANTY MANUAL

The purpose of this range of Grease Arrestors is to deliver best practice for the treatment of greasy waste. The various sizes range from 1,000L to 6,000L, the design offers for most normal applications in domestic, commercial & industrial applications.

The Arrestor product is made of injected-moulding using grade polyethylene and additives provide assurance of leaking, splitting as seen in welded products also eliminating pressure fractures during installation process, polyethylene offers excellent resistance from chemical attack present in waste water contaminants.

This range of Arrestors provides an effective, durable alternative to conventional Arrestors, the ranges light weight product will streamline the installation process eliminating the need for cranes and large truck haulage, installation requires minimal lifting effort.

The following information illustrates the benefits of the Port Capital Arrestor Product Range:

- 100% Virgin Polyethylene materials- (Ref: MSDS).
- Light Weight reducing installation and delivery costs.
- 10 year manufacturer's warranty defect on polymer vessel.
- 5 year manufacturer's warranty on working parts.
- Cost effective.
- BSI Group Certified to AS/NZS 1546.1:2008, AS3996.
- Registered Design.
- UV Protected.

OPERATING FUNCTION:

Arrestors use natural buoyancy of waste liquid and solids in the incoming water stream to separate waste. Separated matter is retained on the surface and bottom of arrestor. To ensure efficiency of product regular maintenance is required by authorised maintenance technician. Collected waste matter should be pumped out on regular basis.

DESIGN:

The Port Capital Grease Arrestor product conforms to the relevant requirements of AS/ANZ 1546.1:2008 and has been certified by the BSI Group. The product has been manufactured with greater wall thickness in radius to ensure optimum strength for final surface loading ratings.

This product has been designed from 100% Virgin polyethylene, resulting in an overall light weight product, making for easier installation with minimal lifting effort removing the need for cranes and heavy haulage, this product can be transported in the back of ute. The use of polyethylene is a preferred product and far superior over concrete alternatives. This advantage is also seen in contaminated ground where precautions need to be taken for installation in material such as acid sulphates. Polyethylene is a product that is easy to clean and as a result the effort to maintenance is reduced with opening for liquid removal making this task a straight forward activity.

The functional requirements for this Arrestor product was to provide a standard 100mm connection to a quality product which has the ability to meet the design storage capacity and out put temperature.

The external ribbing provides the loading criteria to support the structure as installed in ground. The openings take proprietary lids or where design requires greater loading a specification provides the necessary connection D class proprietary lid.

INSPECTION ACCESS COVERS & RISERS:

The injected moulded arrestors use cast iron access cover and polymer risers, all arrestors are supplied with a "D Class lid" to AS3996 standard and should be set-in a finished concrete surround.

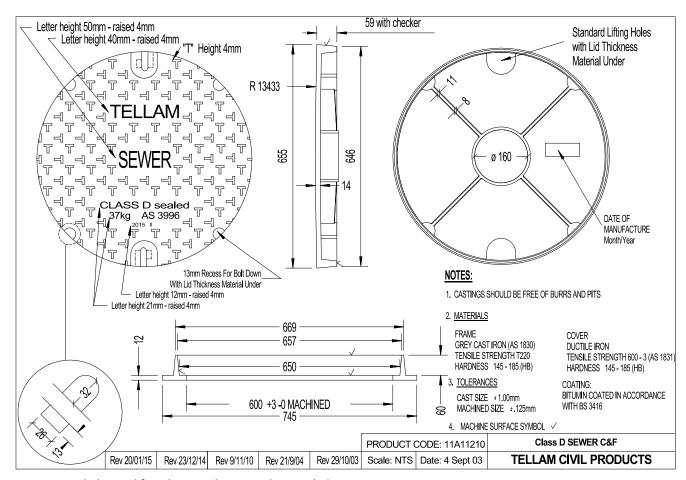
Above Ground Arrestors come with HPDE screw down gas tight lids.

All covers/lids are to meet AS3996 standards. If in the event existing conditions change in areas of installation, changes including covers/lids must comply with Water Corp Authority Approvals. Access extension risers are optional extra and should be ordered to suit site requirements.

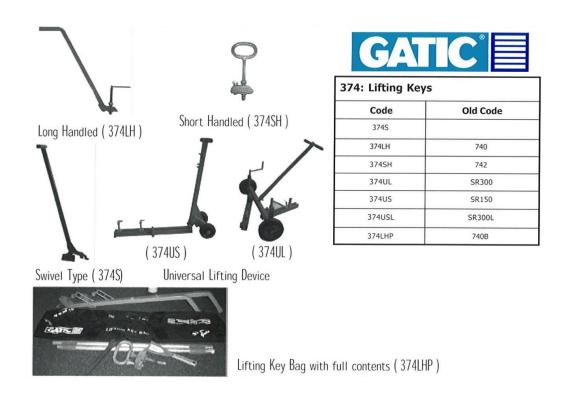
This product allows trade waste drainage to be laid at deeper invert levels to suit deep drainage points. Extension risers do not increase fluid capacity to arrestors; sizing will need to be checked before ordering.

Ensure Water Corporation (WA) will allow the length of access extension required for the inlet and outlet invert depths. Note Port Capital recommends in a Water Corporation area, maximum 900mm extension riser for access lids can be used.

Recommended Gatic style Cast Iron lids should be used as shown on diagram below:



Recommended Gatic lifting keys as shown on diagram below:



CONNECTIONS:

Inlet and outlet points for models 1,000L to 6,000L arrestors are DN100 uPVC pipe as to the Australian Standards. Inlet and outlet points for models 7,000L to 12,000L arrestors are DN100 or DN150 uPVC (if required) pipe as to the Australian Standards.

Adaptors can be purchased to adapt to different pipe materials (Earthenware, HDPE etc.). Ensure all aspects of final design are considered before ordering.

GREASE ARRESTOR INSTALLATION: (BELOW GROUND):

These instructions applies to normal in- ground installations where associated back- fill described therein will be adequate to present a movement uplift effort.

The installation procedures are intended to ensure that the arrestor installation shall be in accordance with all design documentation, product specification in accordance with AS3500/WSAA specification WSA PS-800 passive grease arrestors.

Installation procedures intend to ensure arrestors are able to withstand possible external hydrostatic loads. Failure to comply with recommendations may mean that the product will not withstand such loads. Improper installation will void manufacturer's warranty.

Installation shall be undertaken by a Licenced Plumber. Prior to excavation a dial a dig shall be undertaken to check for any existing in- ground services if needed. All excavation activities are to comply with the code of practice for the relevant state.

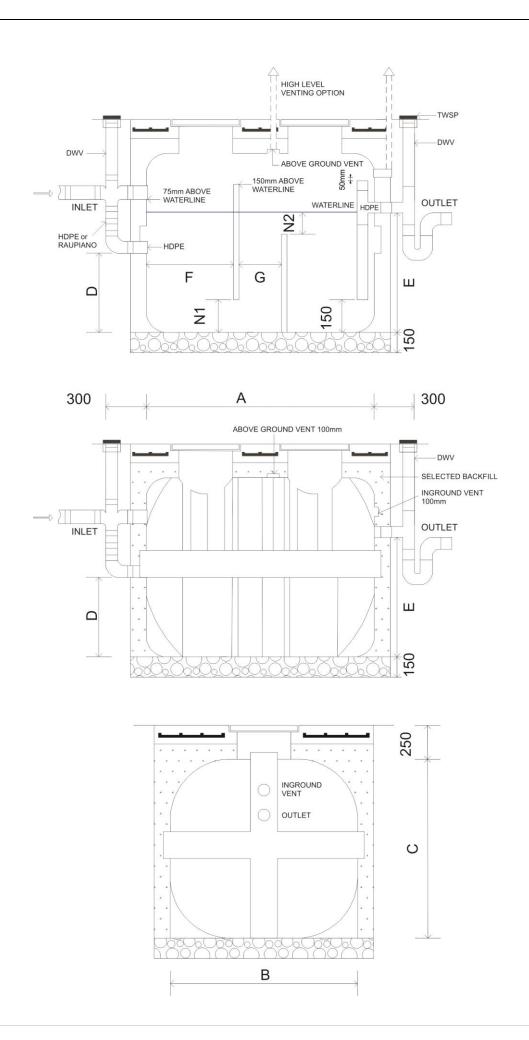
Installation designers and contractors are responsible for ensuring that installation procedures are followed and adequate steps are taken to prevent the arrestor from movement or damage from external forces not foreseen by the standard instructions, including top loading generated by traffic on or around arrestor which exceeds Class D in AS3996.

- A) The arrestor is to be installed with the vessel base below the level of the surrounding ground surface. The excavation is to be large enough to allow at least 150mm clearance around the vessel with adequate clearance around connections to allow drainage pipes and vents to be installed. Excavation must allow at least 50mm extra depth for layering of compacted bedding sand for arrestor to sit. This is required to be level and flat at the required depth. If there is any chance of movement due to swelling or subsidence of the subgrade, it is recommended concrete slab of no less than 75mm thick should be installed.
- B) Arrestors installed with the vessel top below the final ground level are not to be exposed to traffic loads and must be fitted with a cast- iron access cover and frame as to the AS3996 Standards. However, because the upper surface of an in ground arrestor will be encased in concrete, an access extension will be required.
- C) Arrestors installed with the vessel top completely below the ground surface which are to be exposed to traffic loads, must be fitted with required cast- iron access covers and frames as to the AS3996 Standards. Due to the upper surface of the arrestor is encased in concrete, access extensions are required and should be trimmed to length so that traffic access covers are exactly at the finished surface level.
- D) Lift Arrestor into position in the excavation. Note! Do not lift arrestor using the inlet & outlet pipework as this may damage the product. Always comply with workplace health & safety regarding the use of any lifting equipment or cranes (If applicable).
- E) Arrestors must have inspection opening covers on the upper ends of the inlet & outlet inspection openings at the final surface level. Inlet & outlet pipes are ready to connect to waste water sources. Make sure (IO) inspection opening is installed at surface and finished with a finishing collar (IOS).
- F) Ensure vent pipework is supported correctly and positioned in proper locations allowing fumes and odours that maybe generated by tapped wastewater to escape, Please Note! Vents must be installed to a suitable discharge point. Ensure vent connection allows expansion using expansion approved fitting. Most Arrestors have 2 optional vent points.
- G) Arrestor must be filled with water to operating level and inlet pipe to ensure there are no leaks. Check that there are no blockages at connection point. Ensure vessel is filled with water prior to back filling.
- H) Precautions help to prevent the arrestor from being deformed, if an arrestor is deformed and crushed by the backfill, repairs will not be possible and the arrestor must be removed and replaced.

ID LABEL / PLATE:

For Below Ground installations all Compliance Plates (ID Label / Plate) are installed inside the tank neck wall and Above Ground installations on the outside wall of Grease Arrestor.





MODEL	LENGTH	WIDTH	HEIGHT	INLET	OUTLET	BAFFLE 1	BAFFLE 2	WEIGHT
	Α	В	С	D	Е	F	G	
PCGT-1000L	1880 X	1060 X	1160	350	570	580	270	75KG
PCGT-1500L	1940 X	1190 X	1300	500	700	770	340	90KG
PCGT-2000L	1940 X	1190 X	1300	550	875	830	360	90KG
PCGT-3000L	2800 X	1200 X	1300	585	900	1300	460	135KG
PCGT4000/4500	2900 X	1400 X	1600	725	1100	1400	560	200KG
PCGT-5000L	3200 X	1400 X	1800	825	1070	1500	660	250KG
PCGT-6000L	3300 X	1600 X	1850	825	1200	1600	760	350KG

MAINTENANCE:

Arrestors should be maintained by entering a suction hose through the access cover, making sure all contents is removed on all sides of baffles. Pumping out of arrestor shall be conducted by a licenced waste contractor. Once cleaning is completed ensure the arrestor is filled with water prior to replacing the lid.

It is recommended that Commercial units are maintained more regularly than Domestic unit. Water Corporation (WA) will determine pump out frequency of any Grease Arrestor Installation.





...making excellence a habit."

Port Capital provides the following warranty on the Grease Arrestor:

- A. 10- year manufacturer's warranty defect on polymer vessel.
- B. 5- year manufacturer's warranty on working parts.

Terms & Conditions:

1. Port Capital warrants the Grease Arrestor product supplied to distributors will be free from defects in materials and workmanship. Should a defect be identified to Port Capital or their authorised distributors, Port Capital will at its option, repair or replace the product, defects in materials and workmanship will be based on a Pro-rata basis for the warranty period stated above,

Provided that:

- a) The defect has arisen solely from faulty material or workmanship.
- **b)** The arrestor has not been subjected to maltreatment or interference.
- c) The fault has not arisen as the result of inattention or mistake in the installation document procedure.
- **d)** Installation instructions (below ground) have been strictly complied with and carried out by an authorised contractor.
- e) The arrestor is used solely for intend purpose.
- f) The arrestor has not been removed from its original installation.
- g) The arrestor is maintained correctly and all records are kept and can be produced.
- 2. In the event Port Capital at its option repairs or replaces the arrestor product the following Terms & Conditions apply:
- a) Purchaser will pay all the costs for removal of contents of arrestor to allow inspection and/or replacement, (if applicable).
- b) The purchaser is responsible for all costs arising out of a warranty claim, including transportation costs to nominee, installation, handling and storage of arrestor contents and the deposal of any replaced arrestor, (If applicable).
- c) Products installed in remote areas and /or inaccessible locations may need to be returned to a Port Capital distributor or other location requested by Port Capital at the purchaser's expense to enable inspection and/or repair. (If applicable)
- d) To the extent permitted by law, Port Capital's liability is limited to these warranty terms & conditions, in particular the pro-rata cost of repair and /or replacement of the product at Port Capital's option.
- e) Pro-rata means that Port Capital's obligation reduces in line with the time remaining under the warranty, e.g.: if the warranty claim is 5 years into the 10 year Pro-rata warranty, Port Capital's obligation under these Terms and Conditions is limited to a total of 1/2 the cost of repair or replacement of the product only and the purchaser's must pay any additional cost.

<u>DISCLAIMER:</u> This warranty document is to be read in conjunction with WSAA/AS3500 and local authority requirements. Failure to comply with the industry standards shall void this warranty.