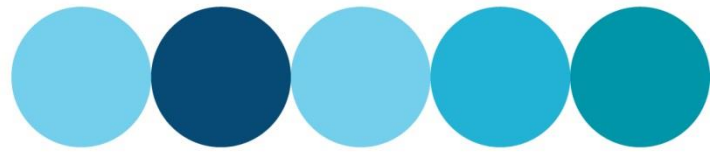


Approval certificate

Trade waste pre-treatment product



Applicant: Halgan Pty Ltd
Postal address: 141 Magnesium Drive, Crestmead, QLD, 4132

Attention: Jaime Cascajares
Web: www.halgan.com.au

Email: jaime@halgan.com.au

Manufacturer: Halgan Pty Ltd
Address: 141 Magnesium Drive, Crestmead, QLD, 4132

Product/device description

The Halgan OHWS oil water separators are designed to separate machine oil, fuel and water from mechanical commercial and industrial applications.

Wastewater enters the separator through the inlet which calms and disperses the incoming wastewater. As the wastewater flows through the separator heavier silt and sediment are separated and sinks to the bottom of the chamber while lighter oils and fuels rise to the surface.

Both oil level and silt sensors are incorporated into the system to alert to build up of separated oil and collected sludge. An oil stop valve is also incorporated to ensure no gross discharge of collected oil / fuel occurs into the sewer system. **These three components must be used in the oil / water separators.**

A final stage coalescence filter is located near the outlet of the separator. The coalescence filter aids in separating the finer and more difficult to separate oil / fuel droplets from the wastewater.

The outlet allows the cleaned wastewater to exit the separator without allowing any of the separated silt / oils and fuels from leaving the separating chamber.

The tank is manufactured from moulded polyethylene which is UV stable and lightweight. The body weights range from approximately 95 kg to 350 kg.

Nominal flow rates vary from 3,600 to 18,000 L/h depending on the model.

The approval certificate applies to the pre-treatment devices of the following sizes:

Approval Number	Model	Max Flow Rate (L/h)	Installation Type ¹	Capacity (L)	Width (mm)	Length (mm)	Height (mm)	Access Lid Type ²	Inlet/Outlet Diameter (mm)	Inlet Height ³ (mm)	Outlet Height ³ (mm)
AN-088-01	OWHS1000	3,600	Both	1,000	1,130	1,700	1,550	Class A, B or D	100	380	455
AN-088-02	OWHS1500	5,400	Both	1,500	1,130	2,280	1,550	Class A, B or D	100	380	455
AN-088-03	OWHS2000	7,200	Both	2,000	1,130	3,010	1,550	Class A, B or D	100	380	455
AN-088-04	OWHS3000	10,800	Both	3,000	1,365	3,055	1,680	Class A, B or D	100	380	455
AN-088-05	OWHS4000	14,400	Both	4,000	1,510	3,250	1,825	Class A, B or D	100	380	455
AN-088-06	OWHS5000	18,000	Both	5,000	1,625	3,200	1,940	Class A, B or D	100	370	445

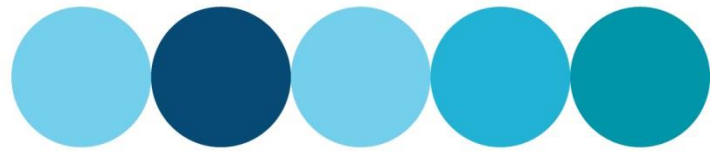
1: Above or Below Ground; 2: Final selection of lid based on installation type; 3: From top of tank.

Special conditions of approval

1. The product shall be *supplied* with manufacturer's installation instructions and recommended procedures for operation and maintenance.
2. The product shall be *installed* strictly in accordance with the manufacturer's written instructions and the *Plumbing Standards*, with particular emphasis on the following:
 - a. Oil water separators must be installed in a bunded area and connected back to the pump pit.
 - b. Flow rate restrictors must be used on pumped discharges to ensure correct flow rates entering the selected model. Flow rates entering must not exceed the rated treatment capacity of the product.
 - c. A Trade Waste Sampling Point (TWSP) must be installed according to the Corporation's typical drawings.
 - d. The oil sensor is not optional and must be installed.
 - e. The silt sensor is not optional and must be installed.
 - f. The oil stop valve is not optional and must be installed.
3. This approval certificate is not a stand-alone document and **must be read** in conjunction with Water Corporation's *Typical Drawings for Trade Waste – Trade Waste Sample Point (HX33-11-30)*.
4. A maintenance contract is to be in place to ensure the ongoing reliability of the product.
5. Water Corporation must be notified within fourteen (14) days upon installation of the product
6. The use of emulsifying agents upstream of the product must not occur. Such instructions must be noted on operating documentation.

Approval certificate

Trade waste pre-treatment product



Special conditions of approval (continued)

7. The product chosen must be suitably sized to avoid surge conditions.
8. Clear access for the purposes of maintenance or servicing of the pre-treatment device must be maintained at all times.
9. This approval certificate is not an endorsement of the product by Water Corporation, and no claim shall be made in advertising, promotion or other manner to the effect.
10. Water Corporation accepts no responsibility for the effective operation, performance or efficiency of the product. This approval is not an engineering approval or structural endorsement.
11. The proponent of the approved product must formally seek a request for re-approval of the product no later than three (3) months before the assigned **Validity Period** has expired from the **Date Issued** of this approval certificate.
12. Water Corporation reserves the right to vary any requirements at any time. Any application of this condition normally occurs after consultation with the manufacturer, supplier and end business user connected to Water Corporation's sewer.
13. Water Corporation shall be notified in writing if the pre-treatment device is withdrawn from sale.
14. The proponent of the approved product accepts that the information provided in this document shall be made publically available.

General conditions of approval

Approval shall be **suspended** where any of the following conditions are not met:

1. If there is a breach of the Special Conditions.
2. The assigned **Validity Period** has expired from the **Date Issued** of this approval certificate.
3. The product shall be manufactured in accordance with Water Corporation's requirements at the time of approval.
4. The product shall be manufactured to comply according to the details noted in **Halgan Pty Ltd Oil-Water Separator (OWHS) – Technical Manual Dec 2018**, in addition to any further details provided by the proponent when seeking this approval.
5. The product supplied for use in Water Corporation's area of operations shall comply with the requirements shown on this approval certificate. Sizes, classes, lengths or other product variables which are available with the product but which are not approved as listed on this approval certificate shall not be offered by the supplier for use in Water Corporation's area of operations.
6. All discharges to sewer associated with this product must not exceed Water Corporation's *Trade Waste Acceptance Criteria*.
7. Prior to any business (which is connected to Water Corporation's sewer) installing this product the business must apply to Water Corporation for a *Trade Waste Permit* for approval to discharge.
8. If this certificate has been issued to the manufacturer of this product then it is the responsibility of the manufacturer to ensure all current and future suppliers / vendors of this product are provided a copy of this approval certificate.

Approval shall be **reviewed** where any of the following conditions occur:

1. The product is manufactured with either different materials, methods of manufacture, location of manufacture, source of raw materials, component subcontractors or models to that at the time of approval.
2. The ownership of the primary manufacturer or any subcontractors is varied from that at time of approval.
3. The standards and/or specifications to which the product was required to comply with at the time of approval have been amended or revised. It is the responsibility of the proponent to immediately advise Water Corporation of any changes to the proponent's drawings and installation, operation and maintenance manuals made at the time of approval.
4. The product has been found to sustain damage or provide unsatisfactory performance on occasions of number considered excessive by Water Corporation, when handled, stored, assembled or installed in accordance with the supplier's or manufacturer's written instructions.

Approved drawing(s):	Halgan Oil / Water Separator Detail - WA (Rev 10, dated 22 Jan 2019)
Authorising person:	Stephen Jerkovic (Team Leader – Investigations)
Date issued	23 January 2019
Validity period:	Two (2) years