Typical Pre-Treatment Requirements
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The following drawings are examples of typical pre-treatment to meet Trade Waste Acceptance Criteria. Customers must consult with a Barwon Water authorised Trade Waste Officer prior to any installation to determine pre-treatment requirements specific to a customer’s business operations.
Coalescing Plate Separator

Separation of oil and solids in trade waste pretreatment facility. Diagram includes:

- Coalescing plate stacks
- Separated oil
- Oil skimmer adjustable
- Oil dam weir
- Outlet weir partition
- Effluent outlet to discharge to DG or trapped tundish
- H.D. Galvanised steel framing
- Optimal waste oil container
- Vertical plate stacks
- Horizontal plate stacks
- Stainless steel internal supports and holding rods
- Non-emulsifying all pumps KSM diaphragm pump
- From pump pit (in ground)

*To be equivalent to Sepa/All pumps specifications*

<table>
<thead>
<tr>
<th>Coalescing Plate Separator</th>
<th>Scale:</th>
<th>Drawn:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N.T.S.</td>
<td>L.V.K.</td>
</tr>
<tr>
<td>Revised:</td>
<td>15/5/97</td>
<td></td>
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<tr>
<td>Drg No:</td>
<td>TWD-19</td>
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</tbody>
</table>
Note: Angle iron frame surround required with steel plate lid.

Straining basket to be supported by galvanised-angle iron frame. All inlet pipework and pipework in the pit, to be approved material for hot discharge. 

Note: For above ground installations, they can be made out of fibreglass or stainless steel.
Note: Angle iron frame surround required with checker plate lid.
PVC liner not suitable for hot discharge GITs.

Covers greater than 600mm must have a 300mm pothole. Covers of a size to be readily removable by one man.

Inlet drain can be cast iron, copper, brass or PVC.

100mm inlet

Permanently fixed rigid baffle constructed of 6mm minimum mild steel or other approved material

75mm compacted packing sand

50mm vent (if air tight covers are fitted)

Outlet junction can be cast iron, copper, brass or PVC.

100mm minimum concrete walls and base with smooth internal finish, with suitable reinforcing mesh in concrete

50mm vent (if required)

Outlet junction can be cast iron, copper, brass or PVC.

100mm outlet

Note: Interceptor shall have a minimum capacity below the invert level of the outlet pipe of 600 litres or have a capacity equivalent to the maximum hourly discharge, whichever is greater.

*Only to be used under direction from Trade Waste Officer*

<table>
<thead>
<tr>
<th>Grease Interceptor (600 litres)</th>
<th>Scale:</th>
<th>Drawn:</th>
</tr>
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<tbody>
<tr>
<td>Minimum size for premises</td>
<td>N.T.S.</td>
<td>L.V.K.</td>
</tr>
<tr>
<td>without commercial dishwasher</td>
<td>13/5/97</td>
<td></td>
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<td></td>
<td>Drg No:</td>
<td>TWD-1</td>
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</tbody>
</table>
Note: Angle iron frame surround required with checker plate lid. PVC liner not suitable for hot discharge GITs.

Covers greater than 600mm must have a 300mm pothole. Covers of a size to be readily removable by one man.

Inlet drain can be cast iron, copper or brass.

Permanently fixed rigid baffle constructed of 6mm minimum mild steel or other approved material.

Outlet junction can be cast iron, copper or brass.

100mm minimum concrete walls and base with smooth internal finish, with suitable reinforcing mesh in concrete.

PVC liner not suitable for hot discharge GITs.

50mm vent (if air tight covers are fitted)

Inlet drain can be cast iron, copper or brass.

Permanently fixed rigid baffle constructed of 6mm minimum mild steel or other approved material.

Outlet junction can be cast iron, copper or brass.

100mm minimum concrete walls and base with smooth internal finish, with suitable reinforcing mesh in concrete.

PVC liner not suitable for hot discharge GITs.

50mm vent (if required)

Inlet drain can be cast iron, copper or brass.

Permanently fixed rigid baffle constructed of 6mm minimum mild steel or other approved material.

Outlet junction can be cast iron, copper or brass.

100mm minimum concrete walls and base with smooth internal finish, with suitable reinforcing mesh in concrete.

PVC liner not suitable for hot discharge GITs.
Trade Waste Pretreatment Facility

**Note:** Angle iron frame surround required with checker plate lid. PVC liner or protected coating to concrete.

Covers of a size to be readily removable by one man.

Permanently fixed rigid baffle constructed of 6mm minimum P.V.C.

75mm compacted packing sand

Minimum 300mm Outlet level

100mm minimum concrete walls and base with smooth internal finish, with suitable reinforcing mesh in concrete.

PVC liner or equivalent approved material

100mm outlet

Plan (cover removed)

**Note:** Interceptor shall have a minimum capacity below the invert level of the outlet pipe of 250 litres or have a capacity equivalent to the maximum hourly discharge, whichever is greater. Can be made out of PVC for above ground installations.

### Interceptor for screen printers
To be used in conjunction with neutraliser

<table>
<thead>
<tr>
<th>Scale:</th>
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<tr>
<td>Drawn:</td>
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<tr>
<td>Revised:</td>
<td>13/5/97</td>
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<tr>
<td>Drg No:</td>
<td>TWD-5</td>
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</table>
Trade Waste Pretreatment Facility

Note: Angle iron frame surround required with checker plate lid.

Note: Interceptor shall have a minimum capacity below the invert level of the outlet pipe of 250 litres or have a capacity equivalent to the maximum hourly discharge, whichever is greater. Can be made out of PVC for above ground installations.

*Marble chips to be checked and maintained every 6 months*

<table>
<thead>
<tr>
<th>Neutriiser for screen printers</th>
<th>Scale:</th>
<th>N.T.S.</th>
<th>Drawn:</th>
<th>L.V.K.</th>
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</thead>
<tbody>
<tr>
<td>To be used in conjunction with interceptor</td>
<td>Revised:</td>
<td>15/5/97</td>
<td>Drg No:</td>
<td>TWD-6</td>
</tr>
</tbody>
</table>
Note: Angle iron frame surround required with checker plate lid.

Note: Interceptor shall have a minimum capacity below the invert level of the outlet pipe of 430 litres or have a capacity equivalent to the maximum hourly discharge, whichever is greater.

*Marble chips to be checked and maintained every 6 months*
Note: Angle iron frame surround required with checker plate lid.

Note: Interceptor shall have a minimum capacity below the invert level of the outlet pipe of 250 litres or have a capacity equivalent to the maximum hourly discharge, whichever is greater.

<table>
<thead>
<tr>
<th>Plaster Arrestor</th>
<th>Scale:</th>
<th>Drawn:</th>
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<tbody>
<tr>
<td>Medium/Large premises</td>
<td>N.T.S.</td>
<td>L.V.K.</td>
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<tr>
<td>Revised:</td>
<td>15/5/97</td>
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<td>Drg No:</td>
<td>TWD-11</td>
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</table>
Perforated steel plate 12mm diameter holes at 25mm centre to centre

100mm x 85° cast iron I.O. bend

Pre cast pits or 100mm maximum thickness of concrete poured in situ to have a smooth internal finish.

Note: Angle iron frame surround required with checker plate lid.

Note: Bucket to be constructed of 5mm galvanised iron or 3mm welded galvanised sheet steel and to be perforated with four rows of 10mm diameter holes at 25mm centres or basket fitted with 6mm galvanised wire mesh.
Note:

- The diameter of the outlet pipe shall be at least one size larger than the inlet pipe, except that where the diameter of the inlet pipe is 100mm the diameter of the outlet pipe may be 100mm.

- The tank and baffle shall be constructed of 0.79mm minimum galvanised sheet iron, 0.63mm minimum sheet copper or stainless steel, all welded construction, or other approved material and construction. Polyvinyl chloride (PVC) shall not be used.

- Air tight cover to be provided to tank and vent to be extended to open air.

- This tank may accumulate quantities of explosive and/or inflammable materials and care should be exercised in the maintenance and general use of the unit.

- Tank capacity below the invert of the outlet is approximately 100 litres.

- Where this unit is to be located below ground level:
  1. The unit shall be surrounded with 100mm minimum concrete walls and base.
  2. The outlet level shall be not greater than 600mm below ground level.
  3. The outlet level shall be connected to a disconnector gully fitted with an approved overflow grate or brass screwed cap.
  4. The outlet pipe diameter shall not be less than 100mm.
  5. Size to be determined by quantity and quality of discharge.
Note: Angle iron frame surround required with steel plate lid.

Perforated steel plate 12mm diameter holes at 25mm centre to centre

Section ‘A’ ‘A’

Plan

Elevation

510mm

410mm

230mm

State: N.T.S. Drawn: M.B. / L.V.K.
Revised: 15/5/97
Drg No: TWD-13

Basket Specification

Basket to be constructed of 2.5mm minimum diameter mild steel wire woven to give 7mm aperture widths on a 32mm x 32mm x 3mm angle iron frame with mitred corners. Top to be welded to angle iron frame. Basket to be galvanised after manufacture.

Alternatively, the basket may be constructed from 3mm minimum thick mild steel plate with 6mm diameter holes at 12mm centres over the entire area of basket. The basket to be galvanised after manufacture.

Basket Specification

Baskets to be constructed of 2.5mm minimum diameter mild steel wire woven to give 7mm aperture widths on a 32mm x 32mm x 3mm angle iron frame with mitred corners. Top to be welded to angle iron frame. Basket to be galvanised after manufacture.

Alternatively, the basket may be constructed from 3mm minimum thick mild steel plate with 6mm diameter holes at 12mm centres over the entire area of basket. The basket to be galvanised after manufacture.

Straining Pit

Note: Angle iron frame surround required with steel plate lid.
The volume capacity of Pit C (TWL) should be equal to the catchment of the open area in square metres covered by a depth of 10 mm.

The contents of Pit C should be in all circumstances pumped to the sewer (via a coalescing plate separator or equivalent.)

The pump used to take the contents from Pit C should be electrically interlocked to an approved external control device to ensure that the pumped discharge ceases during wet weather.

A flow switch fitted on dedicated water supply to the washing system which will only allow the pump to operate whilst the washing system is in use. The washing system must not be used during wet weather (5 minute over-run timer switch relay permitted to allow pump minimum run).

<table>
<thead>
<tr>
<th>Washdown Bay with storm water diversion</th>
<th>Scale:</th>
<th>N.T.S.</th>
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<tbody>
<tr>
<td>Uncovered area</td>
<td></td>
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<tr>
<th>Revised:</th>
<th>15/5/97</th>
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<th>Drg No:</th>
<th>TWD-20</th>
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</table>

CPS 15 oil water coalescing plate separator with pump mounted under Pit C - Pump pit

Concrete hob or bund to sides of wash area to be a minimum of 100mm in height and width

To storm water drain

Pit B - Approved divertor

Pit A - CPS 15 oil water coalescing plate separator with pump mounted under

Pit C - Pump pit

Pit ‘A’ - Approved silt pit

Concrete hob or bund to sides of wash area to be a minimum of 100mm in height and width