Section 6
SPEL Stormceptor®
by-pass separators

The SPEL Stormceptor is the first Environment Agency listed class 1 by-pass separator to BS EN 858-1:2002.

The Stormceptor provides a very effective means of separating oil and other light liquids from stormwater drainage systems.

Compliant to the European Standard BS EN 858-1, the Environment Agency’s Pollution Prevention Guidelines PPG3 and the Construction Products Regulations.
The SPEL Stormceptor® Class 1 by-pass separator is compliant to the European Standard BS EN 858-1, the Environment Agency’s Pollution Prevention Guidelines PPG3 and the Construction Products Regulations.

The ‘heart’ of the SPEL Stormceptor is the unique long life, low maintenance coalescer unit which ‘polishes’ the final effluent AFTER 90% hydrocarbons of silt have been separated out.

The SPEL Stormceptor is a well proven high quality factory-made unit specially designed and fabricated to provide a very effective means of separating oil and other light liquids from stormwater drainage systems.

The SPEL Stormceptor was the first Environment Agency listed class 1 by-pass separator to BS EN 858-1:2002.

The SPEL Stormceptor has been used effectively throughout the UK and abroad since 1985. All sizes and types of development have been catered for, including industrial development sites, hypermarkets and airports. Areas of up to 30 hectares can be covered with a single unit.
Flows according to nominal size (NSB)

The polluted surface water first enters the primary chamber where silt settles out and is retained. The fuel, oil and other pollutants lighter than water, rise to the surface and are efficiently skimmed off and transferred to the separation chamber.

In normal conditions all the flow is through the separation chamber, where the quiescent conditions allow the pollutants to separate out efficiently. Water from the cleanest zone in the separation chamber flows through a coalescer unit, to remove smaller globules of oil, up to the junction chamber and thence to the outlet.

Storm flows above NSB

During a storm the level in the primary chamber rises and the stormwater passes over the weir into the junction chamber and to the outlet.

The design keeps the turbulence within the separation chamber to a minimum which avoids disturbing the contaminants retained.
How to select and specify

1. In accordance with the EA Pollution Prevention Guidelines PPG3:
   • Determine the type of separator – full retention or by-pass.
   • Determine the class of separator – class 1 or 2.
   • Specify whether silt capacity is required integrally or separately upstream of the separator.

2. Against the catchment area within which your requirements fall, the SPEL Separator nominal size can be ascertained.

3. Inlet/outlet pipe connection orientation A-I (see options below).

4. Inlet/outlet diameter in mm.

5. SPEL Separators are available in four specifications to suit invert depths and ground water conditions. Standard, Heavy, Extra Heavy and Special, see tables alongside.

6. Optional extras available see 5.6 and 5.7.
   • SPEL coalescer unit guide rail system.
   • SPEL coalescer unit lifting/locating/locking system.
   • SPEL Econoskim® light liquid skimming and separate containment system.
   • SPEL mechanical anchoring system. See 4.11/4.12.

7. SPEL automatic alarm/monitoring system. See 5.7.

Choice of pipe connections

The orientation of inlet/outlet connections indicated depends on the pipe diameter (see under A-I and D-I overleaf) except for Class 2 Stormceptors which accommodate the larger diameter. Any special requirements contact Technical Sales.

Both inlet and outlet connections are spigots (GRP or PVCU) and can be connected to the site pipework using Flex-Seal, Band-Seal or similar flexible couplings.

Selecting size of SPEL Stormceptor

The nominal size (NSB) is obtained by this formula: NSB = 0.0018A(m²) where A is the catchment area.

<table>
<thead>
<tr>
<th>NSB</th>
<th>Model</th>
<th>Class 1 or 2 Silt Cap. Orientation Inlet/outlet diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>C1 or C2 SC D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>600/600</td>
</tr>
</tbody>
</table>

Example 1
SPEL Stormceptor class 1 by-pass separator NSB 20 model 320C1/SC/D 600/600 (with silt capacity).

Example 2
SPEL Stormceptor class 2 by-pass separator NSB 100 model 4100C2/A 900/900 (without silt capacity).

Specifying size of SPEL Stormceptor

The nominal size (NSB) is obtained by this formula: NSB = 0.0018A(m²) where A is the catchment area.

<table>
<thead>
<tr>
<th>NSB</th>
<th>Model</th>
<th>Class 1 or 2 Silt Cap. Orientation Inlet/outlet diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>C1 or C2 SC D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>600/600</td>
</tr>
</tbody>
</table>

Example 1
SPEL Stormceptor class 1 by-pass separator NSB 20 model 320C1/SC/D 600/600 (with silt capacity).

Example 2
SPEL Stormceptor class 2 by-pass separator NSB 100 model 4100C2/A 900/900 (without silt capacity).

Specifying size of SPEL Stormceptor

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<table>
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<tr>
<th>NSB</th>
<th>Model</th>
<th>Class 1 or 2 Silt Cap. Orientation Inlet/outlet diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>C1 or C2 SC D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>600/600</td>
</tr>
</tbody>
</table>

Example 1
SPEL Stormceptor class 1 by-pass separator NSB 20 model 320C1/SC/D 600/600 (with silt capacity).

Example 2
SPEL Stormceptor class 2 by-pass separator NSB 100 model 4100C2/A 900/900 (without silt capacity).
SPEL Stormceptor® by-pass separators 100 and 200 series, class 1 and 2 models

Compliant to the European Standard BS EN 858-1, the Environment Agency’s Pollution Prevention Guidelines PPG3 and the Construction Products Regulations

Class 2 models available for 100 and 200 series – change C1 for C2 when quoting model reference.

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal size (NSB)</th>
<th>Catchment area a (m²)</th>
<th>Oil storage (litres)</th>
<th>Silt storage (litres)</th>
<th>Overall length (mm)</th>
<th>Overall diameter (mm)</th>
<th>Inlet to Invert (mm)</th>
<th>Base to Inlet (mm)</th>
<th>Base to outlet (mm)</th>
<th>Max in/out pipe diameter (mm) for orientation</th>
<th>Number of access shafts diameter (mm)</th>
<th>Type A-C</th>
<th>Type D-I</th>
</tr>
</thead>
<tbody>
<tr>
<td>103 C1/SC</td>
<td>3</td>
<td>1667</td>
<td>45</td>
<td>300</td>
<td>1550</td>
<td>1300</td>
<td>500</td>
<td>1015</td>
<td>965</td>
<td>160 160</td>
<td>450 600 750 900</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>204 C1/SC</td>
<td>4</td>
<td>2222</td>
<td>60</td>
<td>400</td>
<td>1860</td>
<td>1225</td>
<td>560</td>
<td>1350</td>
<td>1300</td>
<td>300 300</td>
<td>- * 1 -</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>206 C1/SC</td>
<td>6</td>
<td>3333</td>
<td>90</td>
<td>600</td>
<td>2110</td>
<td>1225</td>
<td>560*</td>
<td>1350</td>
<td>1300</td>
<td>300 300</td>
<td>- * 1 -</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>208 C1/SC</td>
<td>8</td>
<td>4444</td>
<td>120</td>
<td>800</td>
<td>2260</td>
<td>1225</td>
<td>560*</td>
<td>1350</td>
<td>1300</td>
<td>300 300</td>
<td>- * 1 -</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>210 C1/SC</td>
<td>10</td>
<td>5556</td>
<td>150</td>
<td>1000</td>
<td>2920</td>
<td>1225</td>
<td>560*</td>
<td>1350</td>
<td>1300</td>
<td>300 300</td>
<td>- * 1 -</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>215 C1/SC</td>
<td>15</td>
<td>8333</td>
<td>225</td>
<td>1500</td>
<td>4227</td>
<td>1225</td>
<td>560*</td>
<td>1350</td>
<td>1300</td>
<td>400 400</td>
<td>- * 1 -</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* 200 Series Stormceptors have a dual size access shaft. For units that will collect silt we recommend using the 750mm diameter access which provides enough room for the silt removal hose to be lowered into the tank during maintenance. The value of ‘A’ here is for the 750mm access – the 600mm access has an ‘A’ value of 700mm.

Dual access shaft openings

For access to desludge primary chamber, cut to 750mm dia. access shaft opening. Where a silt trap is incorporated upstream or silt build up will not occur 600mm diameter access shaft may be adequate.

Refer to 6.7 and 6.8 for more comprehensive data including installation.
SPEL Stormceptor® by-pass separators 300 and 400 series, class 1 and 2 models

Compliant to the European Standard BS EN 858-1, the Environment Agency’s Pollution Prevention Guidelines PPG3 and the Construction Products Regulations

Class 2 models available for 300 and 400 series – change C1 for C2 when quoting model reference.

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal size (NSB)</th>
<th>Catchment area a (m²)</th>
<th>Oil storage (litres)</th>
<th>Silt storage (litres)</th>
<th>Overall length (mm)</th>
<th>Overall diameter (mm)</th>
<th>Inlet Invert (mm) A</th>
<th>Base to Inlet (mm) B</th>
<th>Base to outlet (mm) C</th>
<th>Max in/out pipe diameter (mm) for orientation</th>
<th>Number of access shafts diameter (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>318 C1/SC</td>
<td>18</td>
<td>10000</td>
<td>270</td>
<td>1800</td>
<td>3200</td>
<td>1875</td>
<td>700</td>
<td>1450</td>
<td>1350</td>
<td>450 600 600 1350</td>
<td>2 2 2 - -</td>
</tr>
<tr>
<td>320 C1/SC</td>
<td>20</td>
<td>11111</td>
<td>300</td>
<td>2000</td>
<td>3535</td>
<td>1875</td>
<td>700</td>
<td>1450</td>
<td>1350</td>
<td>450 600 600 1350</td>
<td>2 2 2 - -</td>
</tr>
<tr>
<td>325 C1/SC</td>
<td>25</td>
<td>13889</td>
<td>375</td>
<td>2500</td>
<td>4420</td>
<td>1875</td>
<td>700</td>
<td>1450</td>
<td>1350</td>
<td>450 600 600 1350</td>
<td>2 2 2 - -</td>
</tr>
<tr>
<td>330 C1/SC</td>
<td>30</td>
<td>16667</td>
<td>450</td>
<td>3000</td>
<td>5070</td>
<td>1875</td>
<td>700</td>
<td>1450</td>
<td>1350</td>
<td>450 600 600 1350</td>
<td>2 2 2 1 1</td>
</tr>
<tr>
<td>340 C1/SC</td>
<td>40</td>
<td>22222</td>
<td>600</td>
<td>4000</td>
<td>7060</td>
<td>1875</td>
<td>740</td>
<td>1410</td>
<td>1310</td>
<td>450 600 600 1310</td>
<td>- 1 1 -</td>
</tr>
<tr>
<td>345 C1/SC</td>
<td>45</td>
<td>25000</td>
<td>675</td>
<td>4500</td>
<td>7615</td>
<td>1875</td>
<td>740</td>
<td>1410</td>
<td>1310</td>
<td>450 600 600 1310</td>
<td>- 1 1 -</td>
</tr>
<tr>
<td>350 C1/SC</td>
<td>50</td>
<td>27778</td>
<td>750</td>
<td>5000</td>
<td>8255</td>
<td>1875</td>
<td>740</td>
<td>1410</td>
<td>1310</td>
<td>450 600 600 1310</td>
<td>- 1 1 -</td>
</tr>
</tbody>
</table>

400 series – models without silt capacity are available if required – details on application.

400 series

Class 2 models available for 300 and 400 series – change C1 for C2 when quoting model reference.

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal size (NSB)</th>
<th>Catchment area a (m²)</th>
<th>Oil storage (litres)</th>
<th>Silt storage (litres)</th>
<th>Overall length (mm)</th>
<th>Overall diameter (mm)</th>
<th>Inlet Invert (mm) A</th>
<th>Base to Inlet (mm) B</th>
<th>Base to outlet (mm) C</th>
<th>Max in/out pipe diameter (mm) for orientation</th>
<th>Number of access shafts diameter (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>460 C1/SC</td>
<td>60</td>
<td>33333</td>
<td>900</td>
<td>6000</td>
<td>4400</td>
<td>2700</td>
<td>950</td>
<td>2100</td>
<td>2000</td>
<td>600 750 750 1850</td>
<td>1 1 1 -</td>
</tr>
<tr>
<td>470 C1/SC</td>
<td>70</td>
<td>38889</td>
<td>1050</td>
<td>7000</td>
<td>5250</td>
<td>2700</td>
<td>950</td>
<td>2100</td>
<td>2000</td>
<td>600 750 750 1850</td>
<td>1 1 1 -</td>
</tr>
<tr>
<td>480 C1/SC</td>
<td>80</td>
<td>44444</td>
<td>1200</td>
<td>8000</td>
<td>6170</td>
<td>2700</td>
<td>950</td>
<td>2100</td>
<td>2000</td>
<td>600 750 750 1850</td>
<td>1 1 1 -</td>
</tr>
<tr>
<td>4100 C1/SC</td>
<td>100</td>
<td>55556</td>
<td>1500</td>
<td>10000</td>
<td>7400</td>
<td>2700</td>
<td>1100</td>
<td>1950</td>
<td>1850</td>
<td>750 900 900 1500</td>
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</tr>
<tr>
<td>4125 C1/SC</td>
<td>125</td>
<td>69444</td>
<td>1875</td>
<td>12500</td>
<td>9050</td>
<td>2700</td>
<td>1100</td>
<td>1950</td>
<td>1850</td>
<td>750 900 900 1500</td>
<td>- 1 1 1</td>
</tr>
<tr>
<td>4150 C1/SC</td>
<td>150</td>
<td>83333</td>
<td>2250</td>
<td>15000</td>
<td>9950</td>
<td>2700</td>
<td>1100</td>
<td>1950</td>
<td>1850</td>
<td>750 900 900 1500</td>
<td>- - - -</td>
</tr>
<tr>
<td>4160 C1/SC</td>
<td>160</td>
<td>88889</td>
<td>2400</td>
<td>16000</td>
<td>11830</td>
<td>2700</td>
<td>1250</td>
<td>1800</td>
<td>1700</td>
<td>750 900 900 1400</td>
<td>- 1 1 1</td>
</tr>
</tbody>
</table>

400 series – models without silt capacity are available if required – details on application.
### SPEL Stormceptor® by-pass separators

#### 500 and 600 series, class 1 and 2 models

Compliant to the European Standard BS EN 858-1, the Environment Agency’s Pollution Prevention Guidelines PPG3 and the Construction Products Regulations

These Stormceptors are individually designed in accordance with specific site requirements according to catchment area, class, silt capacity, inlet/outlet connection size and orientation. The following is an approximate guide to the range of models available. Please contact our technical department for your specific requirements. Class 2 models available – change C1 for C2 when quoting model reference.

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal size (NSB)</th>
<th>Catchment drainage area hectares</th>
<th>Oil storage litres NSBx15</th>
<th>Silt** storage litres NSBx100</th>
<th>*Overall length (mm)</th>
<th>*Overall diameter (mm)</th>
<th>Inlet invert (mm)</th>
<th>Base to inlet (mm)</th>
<th>Base to outlet (mm)</th>
<th>Max in/out pipe diameter (mm) for orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5180C1SC</td>
<td>180</td>
<td>10</td>
<td>2700</td>
<td>18000</td>
<td>10040</td>
<td>3650</td>
<td>1260</td>
<td>2615</td>
<td>2390</td>
<td>900, 1200</td>
</tr>
<tr>
<td>5200C1SC</td>
<td>200</td>
<td>11.1</td>
<td>3000</td>
<td>20000</td>
<td>11140</td>
<td>3650</td>
<td>1260</td>
<td>2615</td>
<td>2400</td>
<td>900, 1200</td>
</tr>
<tr>
<td>5250C1SC</td>
<td>250</td>
<td>13.9</td>
<td>3750</td>
<td>25000</td>
<td>13840</td>
<td>3650</td>
<td>1260</td>
<td>2615</td>
<td>2400</td>
<td>900, 1200</td>
</tr>
<tr>
<td>6300C1SC</td>
<td>300</td>
<td>16.7</td>
<td>4500</td>
<td>30000</td>
<td>14250</td>
<td>4150</td>
<td>1425</td>
<td>2850</td>
<td>2600</td>
<td>1200, 1500</td>
</tr>
<tr>
<td>6350C1SC</td>
<td>350</td>
<td>19.4</td>
<td>5250</td>
<td>35000</td>
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<td>4150</td>
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<td>40000</td>
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<td>10500</td>
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<td>41.7</td>
<td>11250</td>
<td>Nil</td>
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<td>6800C1</td>
<td>800</td>
<td>44.4</td>
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<td>55.5</td>
<td>15000</td>
<td>Nil</td>
<td>–</td>
<td>4150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Tank shell – fittings extra. **Where silt capacity required it is available on the models indicated.

Pipe size and orientation designed to suit site pipework and class 1 or 2.

Silt capacity normally provided for integrally in accordance with PPG3.

Series 500 Inside diameter 3500mm, outside diameter 3650mm.

Series 600 Inside diameter 4000mm, outside diameter 4150mm.

### Features

- Filament wound shells are lightweight but have great strength and durability.
- Life expectancy in excess of fifty years.
- Smooth, high gloss, corrosion resistant, resin-rich internal surface.
- External ‘flow coat’ water penetration barrier.
- 25 year warranty.
- Stainless steel coalescer units (class 1 separators) with durable high volume reticulated foam inserts for long life and long term efficiency.

**SPEL automatic alarm/monitoring system**

This is to indicate when separator requires emptying or SPEL Tankstor® with Econoskim®. See 5.7.

### Optional extras

- SPEL coalescer unit guide rail system. See 9.7.
- SPEL coalescer unit lifting/locating/locking system with lifting chains. See 9.6/9.7
- SPEL Econoskim liquid light skimming and separator containment system. Manual or automatic systems which save conventional emptying costs by 90%. Section 11.
- SPEL pollution monitoring and containment systems. Section 11.
- SPEL mechanical anchoring systems. See 4.11/4.12.
- GRP non slip ladder/s with stainless steel fixings.

### Regulation/specification compliance as appropriate

- Environment Agency’s Pollution Prevention Guidelines PPG3.
- European Standard; Separator systems for light liquids BS EN 858-1:2002.
- Materials to BS 3532, BS 3691 and or BS 2782 or equivalent standards.
Compliant to the European Standard BS EN 858-1, the Environment Agency’s Pollution Prevention Guidelines PPG3 and the Construction Products Regulations.

The 200 Series Stormceptor class 1 by-pass separators are single access shaft units with integral silt capacity. There is complete access to both the primary chamber and the fuel/oil separation chamber for desludging by suction tanker provided the 750mm dia. access shaft is utilised.

If a silt trap is situated upstream of the Stormceptor and/or no build up of silt will occur in the primary chamber the smaller 600mm dia. access shaft can be utilised.

Performance

SPEL Stormceptor class 1 by-pass separators incorporate a coalescer unit and are designed to meet the requirements of the European Standard BS EN 858-1 and the Environment Agency’s Pollution Prevention Guidelines PPG3, where the maximum permissible content of residual oil in the outlet is 5mg/l.

The coalescer unit has a robust high volume reticulated foam insert. The insert efficiently coalesces the finer globules of hydrocarbons for gravity separation and due to its large volume, lasts for long periods before requiring cleaning. Cleaning is then a simple operation using normal pressure water. The insert can be reused again and again, rarely requiring replacement.

The inlet/outlet diameters and fall across the separator as indicated ensure optimum performance.

The light liquid storage capacity (fuel, oil etc.) is 15 times the nominal size (NS) in litres, eg. SPEL Stormceptor NSB6 has a light liquid storage capacity of 90 litres.

The first primary chamber can be desludged by a suction tanker providing the 750mm dia. access shaft is utilised.

Specification

SPEL 200 series Stormceptor class 1 by-pass separators incorporate a strong filament wound shell and are manufactured in standard and heavy specification depending on burial depths and water table height as in the table above. See also 6.3.

Inlet/outlet connections

Both inlet and outlet connections are either 225/300/400 dia. Quantum spigots. Flex-Seal/Band-Seal or similar couplings are available for connecting to site pipework if required.

<table>
<thead>
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<th>Burial depths for standard and heavy specification tanks</th>
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<td>Standard</td>
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<td>Heavy</td>
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Handling

Tanks should be lifted using slings not chains. DO NOT drag tanks along the ground for any distance and avoid jarring or bumps. DO NOT lift with water in the tank. See 4.2.

Preliminary

Remove the plastic tie used to hold the coalescer unit inside the tank.

Insert the coalescer unit securely into the base socket.

Ensure the foam insert is fitted inside the stainless steel coalescer unit.

During installation, it is important the foam inserts are not clogged with dust, debris or drops of wet concrete. To safeguard against this, we recommend covering the access shaft with a sheet of polythene.

Installation guidance notes

Installation should be carried out by a competent contractor in accordance with the following procedures, Health & Safety at Work legislation and good building practice.

For detailed instructions see section 4 or installation instructions supplied with every tank.

1. Determine the size of the excavation allowing for the drain invert depth and a concrete surround. Allowance should be made for consolidating concrete under the unit when backfilling.
2. Pour concrete base to correct depth and level off.
3. When the concrete has set sufficiently, place the tank in position, check for levels (including inlet/outlet inverts) and fill with water to a maximum depth of: 200 series – 200mm, 300 series – 300mm, 400 series – 400mm. Ensure concrete slab is clean ready for placing concrete surround. Surround should preferably be placed within 48 hours of casting the base slab.
4. Place backfill concrete (ST4 mix) up to the depth of the water in the tank ensuring the concrete is properly consolidated under the tank to prevent voids. Consolidate by hand – do not use vibrating pokers. Connect up pipework.
5. Continue backfilling with concrete and at the same time filling the tank with water to equalise pressure and resist floatation. Where the tank is divided into chambers ensure all chambers are filled equally.
6. Top up the tank with water to inlet/outlet invert level and place remainder of concrete to a depth of approximately 150-200mm above the top of the tank. Where extension access shaft is fitted, this can be surrounded in concrete once the main tank concrete surround has set. (See Extension access shafts).
7. Where the concrete slab over the tank is to take vehicle loading it should be reinforced in accordance with good practice to take the maximum load and should be extended onto unexcavated ground. It is important that vehicle loading is not transferred to the tank shell or its concrete surround.
8. Incorporate inspection cover and frame. NOTE: For access to desludge the primary chamber fit only 750mm dia. manhole cover and frame.

Venting

SPEL Separators are governed by the requirements of petroleum regulations: Petrol filling stations: Construction and Operation HS(G)41, ISBN 0-11885449-6. These state in paragraph 45, that each chamber of a petrol interceptor should be vented and vent pipes should extend to not less than 2.4m above ground level, should not be less than 75mm diameter and of a robust construction, and should be manifolded above ground.

Extension access shafts

SPEL extension shafts are available in standard lengths of 500mm upwards and 500mm increments. When these should be surrounded with concrete, pour in lifts of approximately 500mm, allowing the concrete to set between each lift.

Commissioning

On completion of installation, check the foam insert is fitted inside the stainless steel coalescer unit, the coalescer unit is inserted securely into the base socket and the tank is free of debris etc.
SPEL Stormceptor® by-pass separators

200 series, class 1 with silt capacity

Catchment area m²  SPEL ref  Nominal size NSB  Oil storage litres NSB×15  Silt storage litres NSB×100  Overall length (mm)  Max pipe (mm)
2222  204C1SC  4  60  400  1860  300
3333  206C1SC  6  90  600  2110  300
4444  208C1SC  8  120  800  2260  300
5556  210C1SC  10  150  1000  2920  300
8333  215C1SC  15  225  1500  4227  300

SPEL automatic alarm/monitoring system

Requirement of the Environment Agency’s Pollution Prevention Guidelines PPG3

The SPEL automatic alarm/monitoring system provides continuous monitoring of the separator contents by sensing when the light liquid within the separator has filled to a predetermined level (with design safety margins), and provides a simple audio-visual warning to alert the operator that the separator needs to be emptied.

Maintenance

The SPEL 200 series Stormceptor class 1 by-pass separators have good access to both the primary chamber and the light liquid separation chamber for periodic emptying of retained light liquids and silt which is essential to maintain the units optimum performance.

Periods between emptying will have to be determined depending on site conditions but normally at least twice a year.

For detailed instructions see section 9.

Procedure in brief

1. Lift handle and coalescer unit out of the tank and place ahead of the separator.
2. Remove foam insert and wash with normal water pressure, ensuring the dirty water runs into the separator.
3. Empty light liquids and silt alternating between both chambers to avoid excessive pressure one side of the partition.
4. Re-insert the foam insert into the stainless steel coalescer unit and re-insert the coalescer unit into the separator.

Choice of pipe connections

Orientation of inlet/outlet pipe connections.

Dual access shaft openings

For access to desludge primary chamber, cut to 750mm dia. access shaft opening. Where a silt trap is incorporated upstream or silt build up will not occur 600mm diameter access shaft may be adequate.