High Efficiency Oil / Water Separator

High Capacity Compressed Air Condensate Cleaners
Guaranteed Performance
The SEPURA range of condensate cleaners employs a specially designed filter set to avoid using the troublesome weir, which is found in many traditional separators. Similarly, it has neither condensate settlement tank nor separate oil container.

In SEPURA, waste oil is trapped only in the filters, so handling is quick and easy. At service time, simply dispose of the old filters and replace them. There is no need to deal separately with the collected oil or untreated condensate from the settlement tank—because there isn’t any!

SEPURA’s design makes it tolerant of any type of condensate drain. In turn, this means quick and easy low-cost installation. However, we do recommend the use of our ‘ECD’ zero-loss drains to maximise energy savings.

Simplicity of design offers economies right across the board, from initial purchase to cost of ownership. SEPURA is also more environmentally friendly, using fewer resources and less energy to make than more complex and expensive designs.

Sterling filters are much less energy-hungry to manufacture than carbon, and are made mostly from recycled materials

With such a simple, risk-free product, it’s no wonder SEPURA can offer you a no-quibble guarantee and a 10-year warranty.

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**How SEPURA works so well—so economically**

**Inlet**
- Allows up to 4 threaded connections. Additional port kit allows up to 8 connections.

**Primary filter**
- This unique, patented filter performs 3 important tasks.
  1. Allows depressurisation of compressed air through its tough permeable walls.
  2. Captures bulk oil. Special oil-attracting material holds up to 32 litres of oil (SEP1800).
  3. Filters out solids that might affect the STERLING filter.

**Sterling filter**
- Polishes the condensate to achieve excellent discharge quality, (oil carry-over <5 ppm in some circumstances) using patented Sterling material.

**Condensate flow**
- Is piped safely and directly into the depressurising void.

**Moulded body**
- Rugged one-piece moulding is free-standing, tolerant of uneven floors and leak-proof.

**Outlet**
- SEPURA ensures outlet water can be legally discharged to foul drain.

**Quick release lid**
- For fast servicing. No loose fastenings to mislay.

**Test point**
- Supplied test kit allows simple check on discharge quality and service status.

**Capacity (cfm/m³/min)** Based on compressor oil carry-over of no more than 5mg/m³

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Filter life (hours)</th>
<th>Oil carry-over at end of life</th>
<th>Inlet connections</th>
<th>Outlet connections</th>
<th>Filter elements</th>
<th>Standard Appearance</th>
<th>Test kit included</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEP 120 ST</td>
<td>120 / 3.4</td>
<td>5000</td>
<td>Up to 5000 hours</td>
<td>&lt; 20ppm</td>
<td>4 x R1/2&quot; Expandable to 8</td>
<td>20mm</td>
<td>1 pair</td>
<td>Yes</td>
</tr>
<tr>
<td>SEP 360 ST</td>
<td>360 / 10.2</td>
<td>5500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 pair</td>
<td>molded in 'compressed air blue' from PE recyclable material, SEPURA branded</td>
</tr>
<tr>
<td>SEP 900 ST</td>
<td>900 / 25.5</td>
<td>6000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 pair</td>
<td></td>
</tr>
<tr>
<td>SEP 1800 ST</td>
<td>1800 / 51</td>
<td>7000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 pairs</td>
<td></td>
</tr>
</tbody>
</table>
SEP 60 ST
Condensate cleaner

Disposable condensate cleaner for compressor system capacities of up to 1.7 m$^3$/min or 11kW

Only SEPURA gives you this performance from such a small package. Our new STERLING filter medium gives SEP 60 ST the capacity to out-perform separators 4 times its size. And it’s pure simplicity to install and replace. Just fix the permanent back plate to a wall or cabinet, insert two push-in fittings and it starts to protect you—and the environment. Oily water in; clean water out. Discharge straight to the sewer (as low as 5ppm oil-in-water) —legally*

At the end of its service life, remove the push fittings, attach the clip-on lid and plug (provided with the replacement unit) and slide it off the wall plate. Sealed, outwardly clean and ready for disposal.

- Compressor capacity up to 60cfm (1.7 m$^3$/min).
- Service life - 4/5000 operating hours at 60cfm (replace annually) or 8000 hours at 30cfm (replace every 2 years)**
- Dimensions only 145mm x 145mm x 220mm approx
- Wall or cabinet mounting (re-useable plate provided)
- Push-in connections for speed and ease
- Cleanest possible servicing routine
- Disposable. Clip-on cap and blanking plug seal the retained oil inside the cleaner for transit.
- Lightweight and compact for international bulk shipping.

SEP 120 ST  SEP 360 ST  SEP 900 ST  SEP 1800 ST
Condensate cleaners

Now even better than ever

- STERLING ‘carbon-less’ filtration
- Works first time—every time
- 100% performance on synthetics
- Up to 5000 hours filter life
- No overflowing
- No pre-soaking
- Rugged reliability
- Consistent performance
- Simple installation
- Low maintenance
- Rapid servicing
- Lightweight handling
- British designed and built
- 10-year warranty and indemnity*

Clean condensate—clear conscience

We all know that the Water Resources Act was introduced to place legal restrictions on industrial discharges either to ground, waterway or storm-water drain for good reasons.

The option of discharging to the foul drain (sewer) system is controlled locally, and the authorities do not usually allow discharges containing more than 20ppm of oil to be introduced to the drains.

Just 250ml of oil can cover acres of water surface, preventing oxygenation; reducing the effectiveness of treatment plants and killing and other wildlife

A compressor of only 18kW can generate close to ten thousand litres of condensate each year, often containing up to 1000ppm of oil and other waste at the point of discharge.

It makes sense to treat this on site because the 99.9% of condensate that is water can be legally discharged to the sewer, while the disposal of a few litres of captured oil is easy and affordable.

SEPURA offers the most economical, simple and reliable method of complying with the legal requirements — letting you do your bit for the planet without breaking the bank.
**SEPURA 3500 & 7000**

**High capacity compressed air condensate cleaners**

Available exclusively from Condensate Systems Ltd, and probably the world’s largest capacity condensate cleaner, SEPURA 3500 & 7000 are uncompromising and reliable allies in the fight against pollution and the battle for legislative compliance.

- Unique and patented environmentally clean re-cycled ‘filter’ medium
- No moving parts
- No power consumption
- No maintenance required until service exchange is due
- Up to 2 years between services at capacities of 3500 or 7000 cfm (100 or 200 m³/min)
- 5000 or 10000 cfm (140 or 285 m³/min) possible depending upon site conditions

For too long, the large user of compressed air has been offered a difficult choice between condensate cleaning technologies; emulsion splitters or multiple ‘carbon bag’ separators.

If a splitter is chosen only for its large capacity, the penalty is high initial cost, complexity and high maintenance. Multiple small separators are notoriously tricky to balance on installation, which results in poor performance, unreliability and expensive waste.

SEPURA 3500 & 7000 offer the best of both worlds. High capacity, simple installation, low running costs and pure performance.

SEPURA 3500 & 7000 can even handle stable emulsions—condensate samples are required to determine performance and capacity.

**General description**

These large SEPURA cleaners are designed to remove oil from compressed air condensate down to levels that are sufficiently low that discharge of treated condensate to the foul sewer is allowed.

Condensate discharged from the compressed air system (together with any compressed air also released) is fed into the substantial pressure relief chamber. Here the energy of discharge is removed, allowing calm entry of the condensate into the filter chamber.

The chamber is built from a standard and inexpensive IBC (intermediate bulk container) with a total volume of approx 600 or 1000 litres (model dependent). 80% of this volume is filled with SEPURA STERLING, a patented oil adsorbing material with extremely high oil capacity and the capability to clean condensate down to <5 mg/ml (5ppm) oil content. The filter bed is submerged in condensate during operation.

A drainage channel collects cleaned condensate at the base of the filter bed, feeding it out through simple push-fit pipe-work, where the outlet position determines the height of water within the filter chamber. A vertical extension pipe ensures siphoning does not occur in the discharge pipe.

A ‘tee’ piece and tap provide an outlet condition monitoring point.

At the end of its service life, the IBC complete with oil residues is taken away for disposal at a registered site. The pressure relief chamber and discharge pipe-work are retained for connection to a new container with clean STERLING material.

**Specifications:** **SEP 3500 and SEP 7000**

<table>
<thead>
<tr>
<th>Filter volume (litre/hr)</th>
<th>Filter medium</th>
<th>Condensate flow max (litre/hr)</th>
<th>Oil retention capacity (litres)</th>
<th>Max life at standard capacity (hrs)</th>
<th>Max life at 5000 or 10,000 cfm (hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 or 800 litres</td>
<td>SEPURA STERLING</td>
<td>175</td>
<td>125/150</td>
<td>16,000</td>
<td>8,000</td>
</tr>
<tr>
<td>800 litres</td>
<td></td>
<td>350</td>
<td>250/300</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size—mm (LxWxH)</th>
<th>disposal weight (kg)</th>
<th>Connections</th>
<th>Sampling method</th>
<th>Outlet oil ppm at end of life</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200<em>800</em>1350</td>
<td>480</td>
<td>Inlet</td>
<td>Visual comparator</td>
<td>&lt;20ppm</td>
</tr>
<tr>
<td>1200<em>1000</em>1475</td>
<td>860</td>
<td>Outlet</td>
<td>Visual comparator</td>
<td></td>
</tr>
<tr>
<td>1200<em>800</em>1350</td>
<td>480</td>
<td>2 * 3/4” BSP</td>
<td>Visual comparator</td>
<td></td>
</tr>
<tr>
<td>1200<em>1000</em>1475</td>
<td>860</td>
<td>22mm air pipe</td>
<td>Visual comparator</td>
<td></td>
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</tbody>
</table>