## OWS 25-5300 Oil-Water Separators

## Game-changing performance





# Condensate management: more than a necessity

Condensate treatment has always been a mandatory part of operating oil-lubricated compressors. With the new OWS 25-5300 oil-water separator, Pneumatech makes it effortless and effective with innovative dual-stage filtration technology that saves costs and the environment.

# Next-level condensate treatment

The dual-stage treatment of the new OWS 25-5300 from Pneumatech uses both polypropylene and activated carbon or organoclay, which allows it to separate out stable as well as unstable emulsions. This ingenious process results in much cleaner wastewater that complies with the toughest environmental standards.

## Better, quicker, cleaner

Depending on your requirement, you have a choice of two cartridges: activated carbon and organoclay. Activated carbon filters remove whatever oil remains in the condensate after the first stage. Organoclay filtration can be used in case of stronger emulsions. The filters can be exchanged as required thanks to OWS 25-5300's easy-to-replace cartridges which makes servicing your oil-water separator seamless, quick, and worry-free.

#### Low maintenance

A maintenance-friendly design and an exceptionally long service interval of 4,000 hours, minimizes any downtime and keeps your production going.

#### Genuine innovation

We've changed the game. Till recently, the solutions for stable emulsions were expensive and relatively ineffective. The solutions we offer cover both unstable emulsions such as those containing mineral oil as well as stable emulsions with synthetic oil. What you get is an oil separation solution that outperforms all the rest.

# Worry-free condensate treatment from Pneumatech

The OWS 25-5300 offers you a total condensate treatment solution that not only makes your oil-water separation process more effective and easier but also reduces maintenance costs. Most importantly, it will ensure that your wastewater meets even the most stringent purity standards

Get in touch with us to know which version works best for your requirement.

## Applications

- In general for a safer and more ecological environment
- Where safe disposal of compressor condensate is mandated by law
- Where emulsions are difficult to separate



## A leap forward

Condensate is the unavoidable byproduct of oil-lubricated compressors. It poses an environmental hazard that has to be handled responsibly. This is done by separating the oil and water contained in the condensate, thereby preventing polluted wastewater from harming the environment. It's not just the right thing to do, in many countries it's a legal requirement.

Pneumatech's OWS 25-5300 is the choice of decisions makers who will only settle for the most reliable and effect solution in the market. In the first stage of the dual-stage filtration system, the condensate flows through a polypropylene filter which

separates out the oil in two steps: first as the condensate passes through it, and second when it fills in the chamber below which traps the oil that rises to the top. In the second stage, the condensate flows through a another chamber where either activated carbon or organoclay, filters out any remaining oil particles in the condensate.

What you get at the outlet is condensate with less than 10 ppm of oil. The presence of oil can be as low as 5 ppm depending on the set-up.

### **Benefits**

- Hassle-free maintenance with simplified service kits that allow for a long service interval of 4000 hours
- Stable and reliable performance with dual-stage filtration
- Clean wastewater, with oil content at the outlet at just 10ppm, and the possibility of going to as low as 5ppm depending on the set-up
- Quick indicator of filter replacement
- Expensive external companies no longer required to dispose of condensate
- Certified by Deutsches Institut f
  ür Bautechnik (DIBt)

#### Dual-stage filtration

In the first stage, oil is separated out with a polypropylene filter. From there the condensate flows into the second stage, where, depending on the cartridge you choose (either activated carbon or organoclay), any residual oil in the condensate will be filtered out.

#### **Overflow indicator**

Red indicator signalizes that the emulsion is flowing too quickly through the media, which requires the inlet to be regulated to reduce the emulsion entering the OWS.

#### **Test Outlet**

Allows for verification of filtration performance.

#### Saturation indicator

Green indicator signalizes that the polypropylene filter is saturated and needs to be changed.



Photoelectric sensor and switch



Multiple inlet manifold



#### Technical specifications for OWS 25 - OWS 5300

| Installation Type                                         | Units        | OWS 25      | OWS 53                   | OWS 106    | OWS 180          | OWS 360     | OWS 636     | OWS 1325    | OWS 2650   | OWS 5300      |
|-----------------------------------------------------------|--------------|-------------|--------------------------|------------|------------------|-------------|-------------|-------------|------------|---------------|
| Max capacity -<br>Mild climate without<br>dryer & filters | m³/hr        | 54          | 113                      | 225        | 383              | 765         | 1350        | 2813        | 5625       | 11250         |
|                                                           | cfm          | 32          | 66                       | 132        | 225              | 450         | 795         | 1655        | 3311       | 6621          |
| Max capacity -<br>Mild climate with<br>dryer & filters    | m³/hr        | 43          | 90                       | 180        | 306              | 612         | 1080        | 2250        | 4499       | 8998          |
|                                                           | cfm          | 25          | 53                       | 106        | 180              | 6/261360    | 636         | 1324        | 2648       | 5296          |
| Dimensions                                                | A<br>mm (in) | 250 (10)    | <b>2</b> 50 <b>(</b> 10) | 390 (15)   | <b>3</b> 97 (16) | 490 (19)    | 583 (23)    | 692 (27)    | 975 (38)   | 975 (38)      |
|                                                           | B<br>mm (in) | 147 (6)     | 147 (6)                  | 278 (11)   | 286 (11)         | 396 (16)    | 446 (18)    | 568 (22)    | 782 (31)   | 1600 (63)     |
|                                                           | C<br>mm (in) | 216 (9)     | 216 (9)                  | 428 (17)   | 507 (20)         | 576 (23)    | 721 (28)    | 970 (38)    | 1000 (39)  | 1000 (39)     |
| Weight                                                    | kg (lb)      | 1.2 (2.6)   | 1.5 (3.4)                | 5.8 (12.7) | 7.7 (16.9)       | 13.1 (28.9) | 25.3 (55.7) | 45.1 (99.4) | 86 (189.5) | 171.9 (379.1) |
| Condensate inlet                                          | mm (in)      | 6mm (1/4")  | 6mm (1/4")               | 2 x 1/2"   | 2 x 1/2"         | 2 x 3/4"    | 2 x 3/4"    | 2 x 3/4"    | 2 x 3/4"   | 2 x 3/4"      |
| Water outlet                                              | mm (in)      | 10mm (3/8") | 10mm (3/8")              | 1/2"       | 1/2"             | 3/4"        | 3/4"        | 3/4"        | 3/4"       | 3/4"          |

Reference conditions
Relative air humidity: 60%
Air inlet temperature: 25°C (77°F)
Running hours per day: 12 hrs
Effective working pressure: 7 bar (102 psi)

| Correction factors    |                   |      |      |      |      |      |      |
|-----------------------|-------------------|------|------|------|------|------|------|
| Relative humidity     | %                 | 0.5  | 0.6  | 0.7  | 0.8  | 0.9  | -    |
|                       | Correction factor | 1.10 | 1.00 | 0.85 | 0.74 | 0.66 | -    |
| Ambient temperature   | °C                | 15   | 20   | 25   | 30   | 35   | 40   |
|                       | Correction factor | 1.33 | 1.17 | 1.00 | 0.76 | 0.50 | 0.30 |
| Running hours per day | hrs               | 12   | 18   | 24   | -    | -    | -    |
|                       | Correction factor | 1    | 0.88 | 0.75 | -    | -    | -    |







