



oceania
SOLUTIONS GROUP

Composite Air Handling Units

For the Hospital, Medical and
Pharmaceutical Industries



LIBERTY
Composite Air Handling Units



Your projects, challenges and requirements are our focus. We have a dedicated team that can engineer tailored solutions for your commercial HVAC application.

Oceania Solutions Group is an Australian owned business that focuses on providing engineered HVAC solutions. We value the importance of relationships with our clients and partners. Our team enjoy collaborating and solving complex 'design and construct' projects for your business with our product solutions.

Oceania Solutions Group are proud of our extensive portfolio and experience within HVAC industry. From industrial applications through to commercial air conditioning installations for tropical and high humidity environments.

Operating throughout Australia, New Zealand and the South Pacific Islands, we provide engineered technical data and commercial support for a wide range of HVAC solutions.

Our experienced team of HVAC professionals work hand-in-hand with market leading suppliers of HVAC solutions and equipment.

With international accreditation from Eurovent, CTI, AHRI, TÜV and AMCA, our products are rigorously tested and certified, meeting Australian and New Zealand standards and regulations.

Partnering with trusted international suppliers, we are available to provide an engineered solution for your next project.

Health Care

The air treatment system is an important part of the entire package of measures aimed at infection prevention. In an operating department where there is a certain pressure hierarchy to prevent post-operative wound infections and contamination by germs, the stability of the air management, filter class and airtightness of the air treatment system is crucial. A removable ePM1 \geq 90% filter on the dirty side is the basic filter class and usually supplemented with a HEPA filter in the duct or above the inlet grille.

In residential care institutions where residents often have a lower resistance, there are strict criteria for air quality and room conditions in order to create a minimal chance of germs and micro-organisms.

In addition to the high hygienic quality requirements, operating costs due to energy consumption and maintenance have a high priority in the selection of air treatment systems.

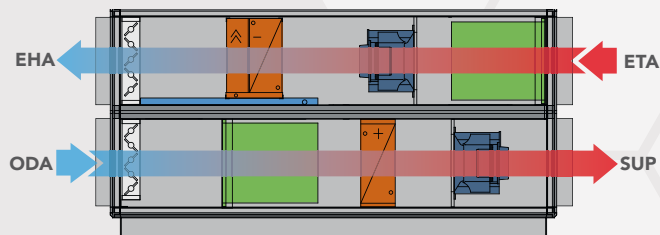


Specific advantages of medical use

- Completely flat PET inner surface where germs such as MRSA can not breed
- Double durable hygienic seal on panels and access hatches, provided with a hygiene certificate and a very low air leakage (L1)
- Locks with overpressure protection concealed in the inspection hatch and post, leaving a smooth hygienic inner wall (VDI 3803)
- No chance of condensation and moisture formation in unwanted places due to high insulation values (T1/TB1)
- Attenuators provided with hygiene certificate (removable)
- Filters removable on the dirty side
- High mechanical strength (D1), resulting in minimal deformation/leakage at high system pressure
- Use of high-quality corrosion-resistant materials (composite or SS316) and hygienic components
- Configurations with optimum accessibility or cleanability on both sides of the components are possible
- Cleaning/disinfection with chlorine or hydrogen peroxide is possible

Bidirectional ventilation unit

Contaminated air can be safely exhausted outside in this configuration, without coming into contact with clean supply air. Due to the twin coil heat recovery, the system becomes energy-efficient and is in accordance with ERP requirements.



Controls

No matter how beautiful the air handling unit is, ultimately the control (Priva Blue ID) ensures that the product becomes part of a properly functioning system. Depending on the requirements of the room conditions, it is possible to regulate on air quantity, pressure, room temperature, outside air temperature, relative humidity, CO2. The control is compatible with Modbus and BACnet.



Our expertise, your benefit

Advantages

- **Corrosion free:** Long service life, low maintenance costs
- **Light weight:** No heavy support structure needed
- **Hygienic:** Easy (chemical) cleaning
- **Eurovent certified:** Reliable specifications

Thermal transmittance	T1
Thermal Cold Bridges	TB1
Mechanical strength	D1
Casing air leakage	L1
Filter bypass leakage	F9



Our unique features

- **Removable panels and inspection panels** with composite/ stainless steel closures
- **12-year warranty on the housing**, without costs and without conditions
- **For outdoor installation**, composite PVC roof with a lifespan of 35 years, composite inlet and outlet grilles with integrated drip trays
- **Flat inner walls due to PET foil finish**, easy to clean and resistant to the most aggressive loads
- **Thermal 70mm PU hard foam insulation**, high insulation value (T1-TB1)
- **Framework and foundation frame made of composite**, corrosion-free, strong and light

- **Professional team and knowledge centre** personal and fast support for all your questions
- **EN1886 highest achievable performances** energy-efficient





Pharmaceutical

Safety first

Sustainable protection of people and the environment is the main focus point when designing air treatment systems for laboratories. The system has the task of creating a stable environment and a comfortable and healthy work environment for employees.

Specific ventilation requirements apply to each type of laboratory. Depending on the BioSafety Levels (BSL) classified in NEN-EN 12 128, ventilation rates and filter classes are ranked.

Supply of sufficient fresh air and the correct pressure differences per room or facility ensure that polluted air is removed and does not flow into the rest of the building.

Our composite air handling units are suitable for the removal of contaminated air without the risk of corrosion. Corrosion class C5i/ C5m. The high airtightness (L1) of the air handling units ensures minimal leakage from and to the room.

Energy-efficient ventilation

To keep energy consumption as low as possible, the air supplied and extracted must be well coordinated with each other and with the process. We have the right operating systems available for this. These systems can communicate with the rest of the installation or the entire building management system.

Corrosion-resistance CX extreme

- Not only the casing, but also the internal partitions, support profile and even the foundation frame are made of corrosion resistant and lightweight composite as standard. (CX replaces C5i and C5m according to ISO 12944-2)
- On request, components in the air handling unit can be supplied in composite, stainless steel 304, 316 or a protective epoxy coating
- All fasteners are in stainless steel 304/316 (external/internal)
- Cleaning with chemical cleaning agents is possible
- Corrosion-resistance of the casing reduces maintenance and downtime
- 12-year warranty on the casing, without costs and without conditions

Hygienic

- Standard air leakage tightness class L1
- Completely flat PET inner surface
- Inside and outside walls are completely flat (VDI 6022)
- Double durable sealing on panels and inspection panels (VDI 6022)
- Locks with overpressure protection concealed in inspection panels (VDI 3803)
- High-quality filter systems according to ISO 16890

Construction

Liberty air handling units are manufactured and assembled in production facilities in the Netherlands, according to customer specific requirements.



Unit wall is weather and UV-resistant, consisting of a composite frame construction and composite panels with a gel-coat top layer.



Completely closed vapor-proof panel with a durable double seal, preventing the ingress of moisture (VDI 6022). Provided with a hygiene certificate.



Cold bridge-free locks concealed in the panel with overpressure protection and key operation (VDI 3803, EN 1886).



Stainless steel filter frames with durable water-repellent filter seal (VDI 6022, VDI 3803).



Available with special (corrosion protected) batteries according to customer specification of any desired manufacturer.



Drip tray under the cooler is fully accessible and easy to clean.



Cleaning with a chemical solution is possible due to PET inner wall lining and sealant with a hygiene certificate.



Installation of filter types on customer specification up to filter class H13. Removable on the dirty side.

Among others, we are working together with:



Radboud Universiteit





About Liberty

Beginning with the German fan manufacturer Rosenberg Ventilatoren, the company that started as a dealership, grew into a manufacturer. After the successful introduction of the composite roof fans, we proceeded to develop and produce a fully composite air handling unit ourselves. Due to the high demand from the market, the composite air handling unit has been Liberty's core business for years.

Mission

Developing a sustainable company where employees and business relations feel comfortable and share knowledge together in order to find the most suitable solution for the customer.

Vision

Our aim is to enable our customers to choose the air handling unit with the lowest weight, the best mechanical properties, the lowest carbon footprint, the lowest maintenance costs and the most energy efficient configuration at market prices.

Corporate social responsibility

Rosenberg's Quality, Safety, Health and Environmental Policy is aimed at ensuring that its products and services meet the requirements of clients and are in accordance with applicable regulations, guidelines, specifications and applicable laws and regulations.

Knowledge centre

Our knowledge centre aims on the one hand to serve our internal organization and customers as well as possible. On the other hand, we also actively participate in sector organizations such as: TWV, VLA and Eurovent in order to share our knowledge and strive for a healthier indoor climate.

Carbon footprint which is 54% lower

A study by the EuCIA shows that the Carbon Footprint of composites is 54% lower than that of aluminium and steel. This is due to advantages in the areas of production, transport, recycling, insulation value and sustainability.

Facts and figures



More than 35 years of experience



2 production plants in the Netherlands



12 years warranty on the casing



Extension to 20 years possible



Active in 23 countries



40 employees

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