

# Composite Air Handling Units

For Industry Applications



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.



# Our strength, your benefit



**Corrosion free** Long lifespan and low maintenance



Reliable specifications



Low weight

No heavy roof construction needed



**Professional team** 

Quick and effective support



Hygienic

Easy cleaning



Energy efficient

# **Certifications and standards**

- Outstanding thermal performance, beyond the minimum requirements.
- Weather proof and UV resistant corrosion free casing construction, standard suitable for corrosive environment classified C5, according ISO 12944-2.
- Hygienic design with completely smooth inner surface and double panel sealing.
- Low weight construction, perfect for roof mounting.

#### **EN1886 Mechanical Performance**

Thermal transmittance	T1
Thermal bridging	TB1
Mechanical strength	D1
Casing air leakage	L1
Filter bypass leakage	F9
EUROVENT	

PERFORMAN

## **Specific solutions for every sector**



#### Pools

The composite Liberty air handling units are the solution to withstand exposure to chlorine compounds and excessive moisture in the extracted air of swimming pools.



#### Industry

The corrosion free casing construction with specifically selected high quality internal components provide a sustainable solution for nearly any industrial ventilation system.



#### Renovation

One piece delivery up to 12m length with factory mounted cabling and controls enable a short time frame for replacement during a scheduled maintenance stop of existing end-of-life units. Flat pack delivery is optional in the case of mounting locations with limited accessibility.



#### Health care

The corrosion free and hygienic design of Liberty air handling units suit the variety of health care ventilation applications like operation rooms, hospitals, laboratories and pharmaceutical facilities.

# **Hygiene factors**

- Perfectly smooth inner and outer wall casing construction (VDI 6022 guideline).
- Long lasting double sealing on panels, doors and hatches (VDI 6022 guideline).
- Lockable lift and turn latches with hidden pawl inserted in doors and hatches (VDI 3803 guideline).
- Minimal risk of surface condensation on casing construction (only in case of extremely high relative humidity). No moisture accumulation on unwanted locations (VDI 6022 guideline).





## **Unique features**

- Removable panels and inspection hatches with composite/stainless steel latches.
- Withdrawable components like heating coils, dampers and cross flow plate heat exchangers.
- Outdoor units equipped with PVC roof covering and fitted with plastic intake and discharge grids with built-in polypropylene droplet eliminators.
- Smooth inner walls with PET foil finishing, easy to clean and resistant to excessive corrosive environmental conditions.
- PU hard foam thermal insulation 70mm for excellent thermal performance (T1-TB1).
- Composite corrosion free framework, with a rigid base frame.

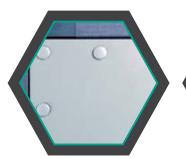
### **Replacement market**

- One piece delivery of air handling units (for outdoor installation) up to 12m length with heat recovery for volume flows up to 70.000m3/h.
- Plug and play delivery with integrated controls and pre-assembled cabling.
- Replacement of existing air handling units are feasible during the scheduled maintenance program.
- Air handling units are deliverable in sections or in one part. On site assembly of flat pack delivery is optional in the case of hard-to-reach locations.



### **Corrosion resistance**

- Corrosion on casing construction is not possible.
- All fasteners in stainless steel AISI 304/316 (internal/external).
- Standard casing construction is suitable for application in corrosive environments; classified C5 according to ISO 12944-2.
- Wet cleaning with detergent solution is allowed.
- No permanent construction damage in case of excessive water exposure caused by calamities.
- Corrosion resistant casing results in extended maintenance intervals, meaning less time to repair and less down time.



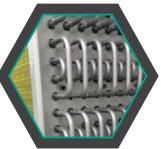
Weatherproof and UVresistant casing, consisting of a composite frame construction and fibre reinforced panels with gelcoat top layer.



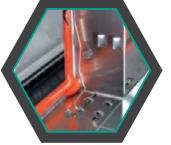
Fully closed vapour tight panel with durable double sealing, prevents penetration of moisture (VDI 6022 guideline).



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



Installation of tailor made (corrosion protected) coils from any coil supplier at customers' request.



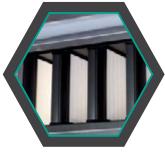
Filter frames (stainless steel AISI 316 and galvanised) with durable, water repellent sealing (VDI 6022 & VDI 3803 guideline). Filter frames suitable for filter types up to filter class F9 (EN 1886).



Completely accessible drain pan under cooling coil, that can be fully and easily cleaned.



Corrosion protected plate heat exchanger (on demand) with epoxy coated drip tray.



Front withdrawable compact filters on customer request.

### Notes

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