

# **Case Study**

# Noumed-Pharmaceuticals, SA



Delivering compliant pharmaceutical production and warehouse cooling through cutting-edge indirect evaporative solutions.

# Noumed Pharmaceuticals, SA

#### **Project Address**

Unit 1, 1-4 Enterprise Drive, Salisbury South, South Australia 5106

#### Contracter

Specialist Air Devilee's Airconditioning
Management and Refrigeration

Installer

#### **Equipment**

6 x Climate Wizard Indirect Evaporative Air Conditioning Units

Model: Climate Wizard CW-H15

#### **CUSTOMER PROFILE**

Noumed Pharmaceuticals, the Australian subsidiary of UK-based pharmaceutical company Noumed Life Sciences is a 26,000m² pharmaceutical manufacturing and warehouse facility, to produce and distribute a range of over-the-counter pharmaceuticals to the local Australian market.

### **INDUSTRY**

- Pharmaceutical manufacturing
- Industrial
- Warehouse

#### **APPLICATION**

- Stand-alone cooling
- Dedicated Ventilation
- Integration
- BMS Interface

Noumed Pharmaceuticals Pty Ltd, a subsidiary of the UK's Noumed Life Sciences, has established a state-of-the-art 26,000 m² pharmaceutical manufacturing and warehousing facility in Salisbury, South Australia. The facility has been purpose-built to produce and distribute a wide range of over-the-counter medicines for the Australian market.

The site includes a 3,000 m² GMP-compliant, temperature-controlled warehouse capable of storing over 3,000 pallets of finished, packaged products. This area includes a secured caged zone for the storage of scheduled medicines and serves as a central hub for receiving and distributing products from approved manufacturers.

In its initial phase, the facility focuses on producing liquid formulations such as cough syrups, paediatric suspensions, creams, and nasal sprays, as well as packaging solid dose tablets. A second phase will see the expansion of manufacturing capabilities to include solid dose production. Once fully operational, the plant will have an annual capacity of 40 million units and will support 180 permanent roles across pharmacy, science, engineering, and logistics.

# **Project Requirements**

To ensure compliance with strict pharmaceutical standards and maintain a high level of comfort for staff, Noumed required a specialised HVAC solution. The key requirement was to deliver 100% outside air comfort cooling to both the outbound goods loading area and the dangerous goods storage area. The system also needed to provide a low supply air temperature without adding moisture, critical for maintaining the integrity of pharmaceutical products.

Additionally, it was essential to maintain positive pressure in these areas using filtered outside air to prevent unconditioned air infiltration. Energy efficiency was another major priority, with a strong preference for a cooling system that could deliver lower operational costs than conventional refrigerated alternatives.

#### **Proposed Solution**

Seeley International supplied six CW-H15 Climate Wizard units to meet these needs. This hyper-efficient indirect evaporative cooling technology delivers 100% fresh outside air without introducing any additional moisture, making it ideal for sensitive pharmaceutical environments.

Operating independently, the units supply a total airflow of 6,600 L/s and provide a consistent supply air temperature of  $19.3^{\circ}$ C under peak summer conditions (38°C DB / 21°C WB ambient). The system offers a total cooling capacity of 54.6 kW with a Coefficient of Performance (COP) of 5.0, delivering excellent efficiency compared to traditional HVAC systems.

## The Outcome

The installation of the Climate Wizard system successfully delivered consistent temperature control across the facility's critical areas year-round. The use of 100% filtered outside air helped pressurise the spaces, effectively eliminating the risk of air infiltration and supporting Noumed's GMP compliance. Indoor air quality is of premium quality, creating a healthier and more stable environment for both people and products.

In addition to meeting the technical and compliance objectives, the solution delivered significant energy savings. The high-efficiency system contributed to reduced running costs while aligning with Noumed's goals for sustainable and cost-effective operations as they expand their local production capabilities in Australia.





| ASHRAE 0.4% Monthly Conditions (Parafield Design Conditions) - Ambient - 38.9 °C DB / 19.6 °C WB / Indoor - 24.0 °C DB / 50% RH |         |         |         |         |          |          |          |          |          |          |         |         |
|---|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|---------|---------|
|   | Jan     | Feb     | Mar     | Apr     | May      | Jun      | Jul      | Aug      | Sep      | Oct      | Nov     | Dec     |
| Dry Bulb  | 42.0 °C | 40.4 °C | 38.1 °C | 33.0 °C | 26.3 °C  | 20.8 °C  | 19.8 °C  | 23.2°C   | 28.3 °C  | 34.5 °C  | 38.1 °C | 40.7 °C |
| Wet Bulb  | 20.0 °C | 21.5 °C | 19.1°C  | 16.8 °C | 14.7 °C  | 14.0 °C  | 13.0 °C  | 13.7°C   | 15.3 °C  | 16.4 °C  | 18.8 °C | 19.6 °C |
| <b>Dew Point</b>  | 5.5 °C  | 11.3 °C | 6.6 °C  | 4.7 °C  | 5.7 °C   | 9.1 °C   | 7.8 °C   | 6.2°C    | 5.3 °C   | 1.5 °C   | 5.6 °C  | 5.5 °C  |
| 6 x CW-H15 (6,600 L/s @ 150Pa Max. ESP) - Performance for Stand-alone Cooling   |         |         |         |         |          |          |          |          |          |          |         |         |
| CW-H15<br>Supply Air Temp   | 17.7°C  | 19.5 °C | 17.2 °C | 15.4°C  | 14.1 °C  | 14.2 °C  | 13.4 °C  | 13.5 °C  | 14.4 °C  | 14.8 °C  | 16.9 °C | 17.4 °C |
| Stand Alone Cap   | 88.2 kW | 73.2 kW | 92.4 kW | 106.8kW | 117.6 kW | 117.0 kW | 123.6 kW | 122.4 kW | 115.2 kW | 112.2 kW | 94.8 kW | 90.6 kW |
| Stand Alone COP   | 8.2     | 6.8     | 8.5     | 9.9     | 10.9     | 10.8     | 11.4     | 11.3     | 10.6     | 10.4     | 8.8     | 8.4     |









For more information, please call 1300 475 091 or email commercial@seeleyinternational.com



We provide full technical support to ensure optimal design for each application.

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