

Electric Air Heater



Windsor Energy is a trusted world class supplier of sustainable process heat to the industrial sector globally, with an extensive installed base of heat plant and a commitment to drive continuous improvement in its product range.

Background

Windsor now offers an electro-technology solution that enables industrial sites to transition process air heating from fossil-fuel-fired systems to all-electric air heating.

Drawing on more than 30 years of experience supplying industrial air heaters, Windsor has developed a modular electric air heater suitable for both new plant installations and retrofit applications.

This zero-emission, low-maintenance solution enables sites to transition to secure and sustainable electrical energy sources while maintaining reliable process performance.

Designed and engineered for safe, efficient, and dependable operation, the system incorporates industry-leading power control technology to optimise energy management, temperature control, and overall plant performance.

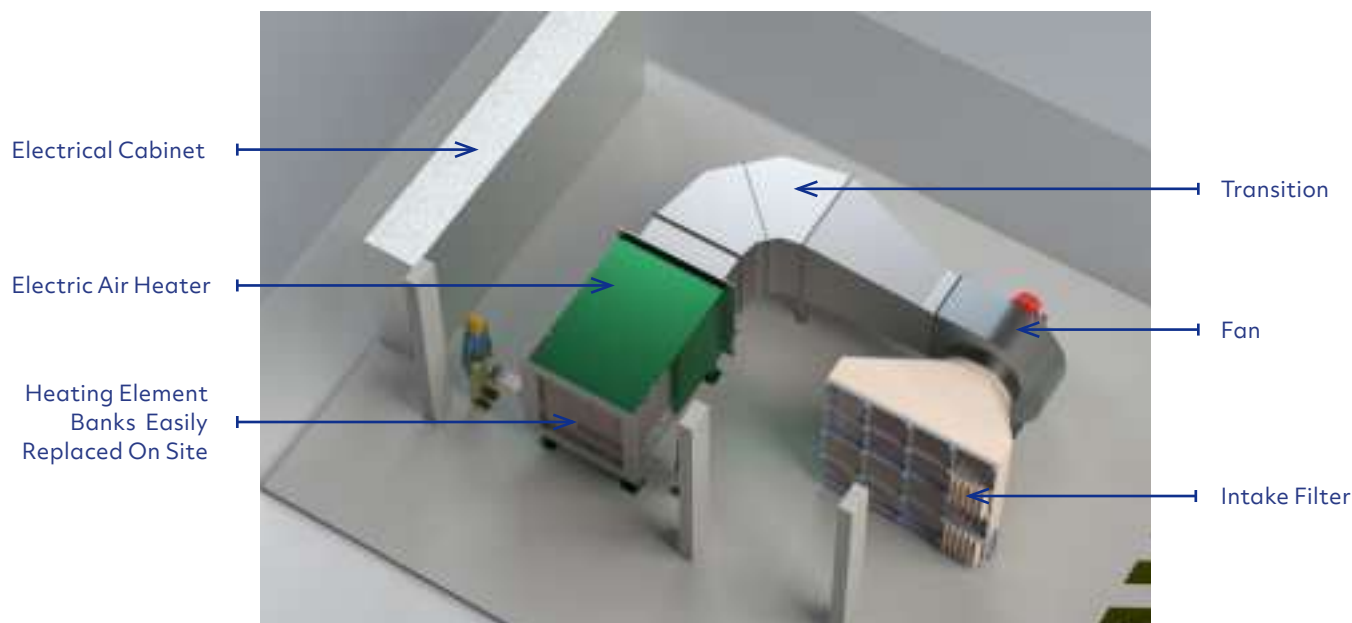
Ideal for applications requiring clean, precisely controlled process air, the Windsor Electric Air Heater is well suited to dairy, food, pharmaceutical, timber, and industrial drying processes. By eliminating combustion from the heating process, the system delivers clean, hygienic heated air with no combustion gases entering the process air stream and zero direct process heating emissions.

Features

- High thermal efficiency greater than 99%
- Bespoke modular design for both greenfield installations and brownfield retrofit applications
- Stainless steel SS316L construction
- 3-phase electric heating elements with 400 V, 690 V, 3.3 kV and 6.6 kV options
- Solid-state power control with no mechanical contactors for precise power modulation and enhanced reliability
- Removable element bundles for simple maintenance and replacement
- Integrated process airflow monitoring and safety interlocks
- Optional process air fan and filtration package
- CompactLogix PLC-based control system
- Designed and fabricated in Wellington, New Zealand, with locally sourced components wherever practical

**Clean Process Air.
Zero Emission.
Turnkey Package.**

Electric Air Heater



Benefits

- Zero onsite emissions
- No combustion, flue stack, or associated air discharge resource consent requirements
- Hygienic heating solution with no combustion gases entering the process air stream
- Durable, low-maintenance design with minimal moving parts
- Precise temperature control
- High availability and reliable operation
- Lower operating complexity and reduced maintenance requirements
- Suitable for integration with renewable and off-peak electrical energy sources
- Reduced total cost of ownership and simplified plant operation

Applications

- Dairy processing
- Food manufacturing
- Pharmaceutical production
- Nutraceutical processing
- Spray dryers
- Fluid bed dryers
- Process air heating systems
- Clean air and hygienic heating applications
- Industrial drying processes
- Timber drying and kiln applications

Site Works

- **Installation:** Windsor can provide a complete turnkey installation package or supply experienced construction supervision for client-managed projects.
- **Commissioning:** Experienced Windsor Commissioning Engineers can undertake system commissioning, performance testing, and plant optimisation.
- **Training:** Comprehensive operator and maintenance training can be provided during commissioning and handover to ensure safe and effective operation.