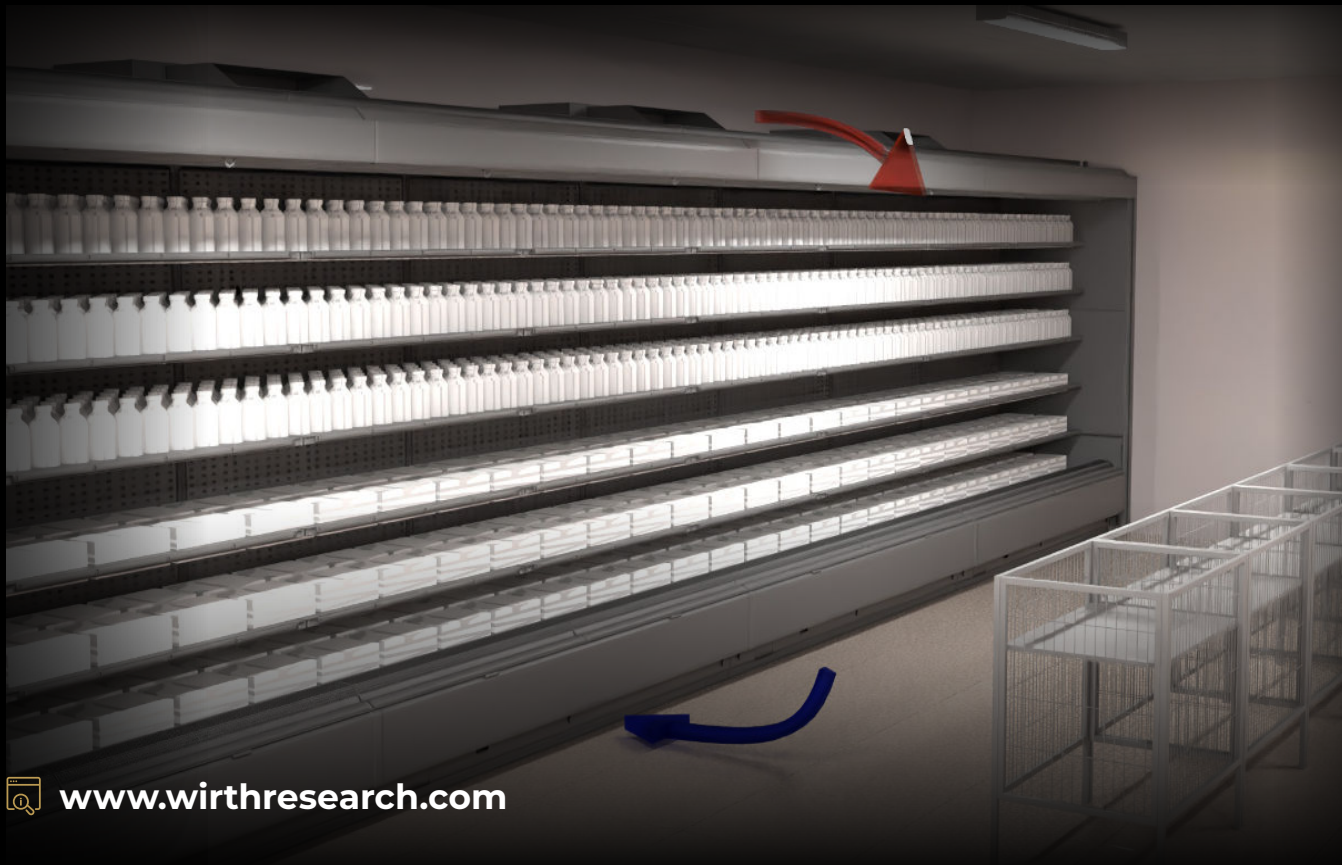


CLIMATEFLOW™

REVOLUTIONARY HVAC REPLACEMENT TECHNOLOGY

Hyper-efficient air management technology reduces HVAC CAPEX & OPEX, while optimising indoor environments.



 www.wirthresearch.com



50-80%

REDUCTION IN ENERGY USE

Save over 50% on annual heating/cooling costs

Savings increase to as much as 80% for supermarkets using waste energy recapture

Our award-winning ClimateFlow technology

improves indoor comfort — all while consuming up to 80% less energy compared to traditional HVAC systems.

“

A significant and compelling sustainability initiative that creates positive social, environmental, and/or economic outcomes that produce lasting value for customers, employees, and the industry

— NACS Awards judging panel, 2024


wirthresearch

CLIMATEFLOW™

REVOLUTIONARY HVAC REPLACEMENT TECHNOLOGY

HOW IT WORKS

- 1 Low level cold air is drawn into the ClimateFlow system from under the refrigerated cabinets
- 2 The air is heated from a room temperature water loop using recovered refrigeration energy without affecting cabinet efficiency
- 3 Warmed air is recirculated locally to heat the store aisles at just above head height, creating a comfortable aisle temperature for customers

CORE BENEFITS

- ✓ Removal of refrigerants from inside the building
- ✓ Delivery of air is designed to maximise customer comfort
- ✓ Designed to optimise heat pump efficiency, or remove the need for a heat pump altogether
- ✓ Lower installed cost than the traditional system
- ✓ Ongoing energy savings of 50-80%
- ✓ Enhanced ESG credentials

PERFORMANCE



Upto 80% reduction in HVAC energy consumption in supermarkets



Save over 50% on annual heating/cooling costs in office spaces



18 months return on investment

CLIMATEFLOW ENERGY RECOVERY SYSTEM KEY FEATURES

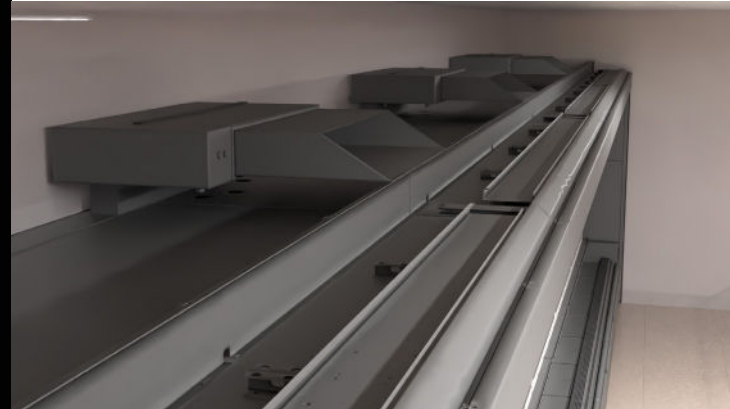
- Connects to existing refrigeration pack using heat exchanger to recover all available heat energy
- High efficiency EC pump delivers low temperature warm water (c.25°C)
- Proprietary control system manages system demand and available energy to ensure sufficient heating
- Buffer tank enables energy storage to manage demand peaks
- Directly harvest all available energy without the need for a heat pump
- Suitable for multiple refrigerants which can be located outside the building

CLIMATEFLOW VS TRADITIONAL HVAC SYSTEMS

Hyper-efficient design enables effective heating using air at significantly lower temperatures, broadening the range of useable heat sources for repurposing waste energy. As a result, a much smaller heat pump can be used to deliver the same comfortable warmth, reducing both energy consumption and equipment footprint.

USES

- ClimateFlow Zone - for refrigerated supermarket aisles
- ClimateFlow Max - for larger, ambient temperature spaces
- ClimateFlow Pro - for offices, banks, hotels & restaurants



ABOUT WIRTH RESEARCH

Evolving from a successful history in motorsport, Wirth Research now uses its leading technology in Computational Fluid Dynamics (CFD) and engineering expertise to design energy and cost saving products.

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