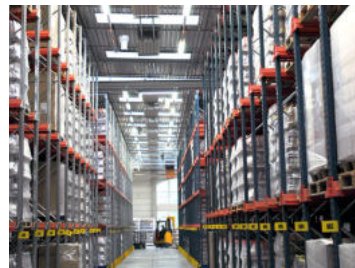




SAVE ENERGY, CUT COSTS, IMPROVE COMFORT, REDUCE CARBON

Save 20-50% on heating & cooling costs in
**Warehousing & Distribution
Facilities with Airius**

The world leaders in Destratification technology



www.airius.co.uk

Destratification is recommended by The Carbon Trust*



Warehousing & Distribution

Airius are world leaders in destratification fan technology and have the largest range of fan units, suitable for any warehousing or distribution application.

Westcoast Warehouse Facility

Warehouses and distribution centres often prove costly when it comes to heating and cooling due to the volume of space and high ceilings common in these types of buildings. Storing stock at optimal temperatures is also vital. Not only can undesired high or low temperatures have a negative impact, but other conditions such as condensation can also impair or damage stock.

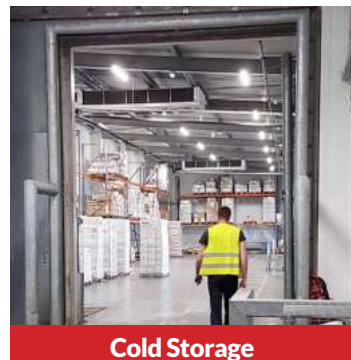
In temperature regulated facilities unbalanced temperatures can result in high level racking not meeting temperature requirements, leaving valuable storage space redundant.



Warehouses



Distribution Centres



Cold Storage

3

Airius destratification fans work simply and inexpensively alongside all types of HVAC equipment to improve your energy management by balancing temperatures, reducing both heating and cooling costs by between 20% to 50% or more and create gentle air movement throughout the internal space.

Airius are World leaders in destratification fan technology and have the largest range of fan units that can be installed into both open and suspended ceilings and are suitable for any warehouse or distribution building application, such as:

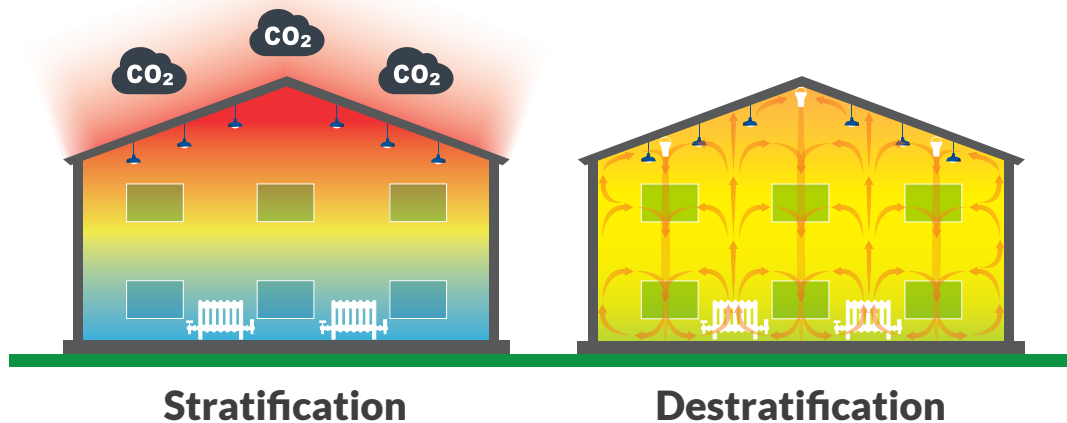
- Public or Private Warehouses
- Distribution Centres
- Cold Storage
- On-Demand Storage
- Bonded/Customs Warehouses
- Smart Storage Facilities
- Government & Defense Warehouses
- Fulfilment Centres
- Cross-Docking Warehouses
- Hazardous Materials Storage

How it works

Thermal stratification affects all buildings and has been labelled as *“the single biggest waste of energy in buildings today.”* - DTE Energy.

Hot, lighter air rises towards the ceiling. Cool air falls to the floor. This causes a dramatic temperature difference between the floor and ceiling and results in HVAC systems over-delivering on both heating and/or cooling to overcome the effects of thermal stratification.

Consequently, energy bills are much higher and internal environments rarely meet expectations.



Airius destratification fans are installed at ceiling height and send air down to the floor in a tight, slow-moving column.

When this air reaches the floor, it radiates 360° outwards until it meets a vertical surface and/or air coming from neighbouring Airius fans and then it rises back up towards the ceiling.

As this air rises it entrains back into the descending column, which creates millions of tiny vortices, making the air move at the same speed throughout the whole interior space creating a balance of temperature.



Significantly reduces heating and cooling costs



Comfort level improved throughout



Reduces CO₂ emissions



Recycles heat from processes, people and solar gain



Stores heat in concrete floors, walls etc



Reduces or eliminates condensation and corrosion



Improves and optimises thermal management of stock

Features & Benefits

Airius destratification fans are the only brand to feature our patented multi-vane stator technology.

While most fans use basic motors to churn air through space, Airius fans are equipped with industry-leading EBM Papst motors, which help to deliver incomparable levels of efficiency and longevity.

Main Benefits

- Optimises both heating and cooling
- 40%+ reduction in heating costs
- 40%+ reduction in CO₂ emissions
- Increases staff productivity
- Works with & reduces maintenance costs for ALL HVAC systems
- Recycles heat from processes, machinery, lighting and solar gain
- Balances temperature for high racking
- Reduces or eliminates condensation, corrosion & wet floors
- Increases lighting lifespan
- Stand alone or BMS integrated
- Vastly improves comfort levels
- 30%+ reduction in cooling costs
- Rapid ROI - Usually 8 - 18 months
- Minimal running costs (from £24/pa)
- Simple to install with no ducting required
- Significantly reduces heat loss through roof & roller/shutter doors
- Improves thermal management of stock
- Easy retro installation or designed into new build specification
- Minimal maintenance required
- Eligible for grants/loans

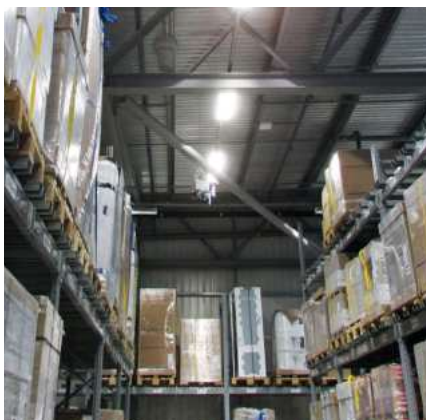
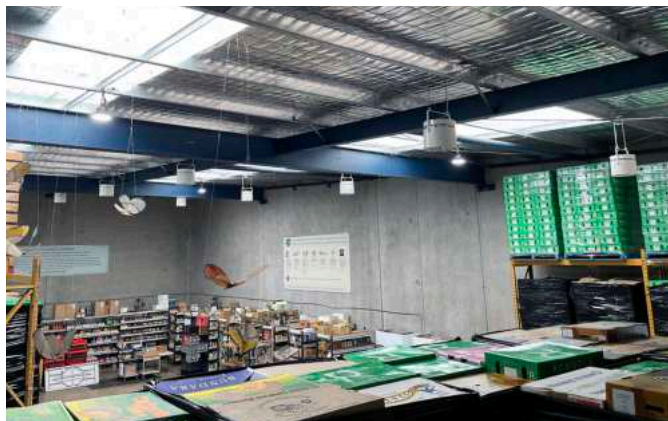
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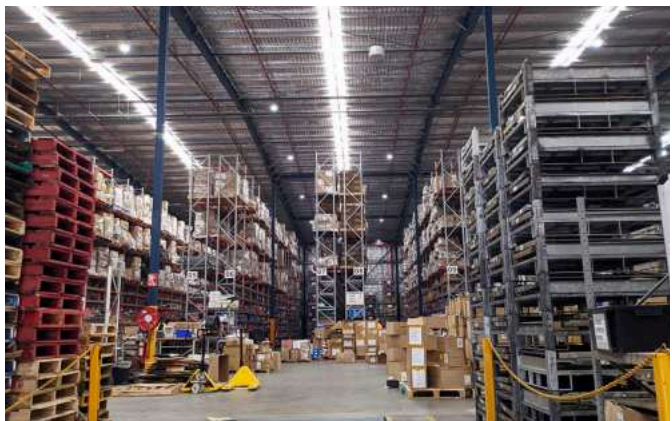
"The first project we did we measured, based on our bills, a **return within 18 days!** We did have the destrat fans studied and they assessed that **it's easily cutting heating bills by 20-25%.** I'd say they're brilliant."

We've worked out that **we've eliminated thousands of tons of CO₂ over the years using Airius.** It's helping us on our emissions targets and **keeping our heating bills down as well."**

Jack Gale
Energy Manager
Lush Cosmetics







Assured quality

Airius Destratification fans have been installed into many commercial, private, public and government buildings. Discover who we work with and what they have to say.

Customer testimonials

“We measured, based on our bills, a return within 18 days.

Jack Gale – Energy Manager - Lush Cosmetics

“The first project we did we measured, based on our bills, **a return within 18 days!** We did have the destrat fans studied and they assessed that **it's easily cutting heating bills by 20-25%**. I'd say they're brilliant.

Most of the staff don't even notice they're running, but **I notice it in our heating bills**. Ultimately, anything that's going to improve staff comfort is a big win for us. Equally if they're in an area that's too hot and we can pull that heat away from them.

We've worked out that **we've eliminated thousands of tons of CO₂ with Airius** over the years. It's helping us on our emissions targets and keeping our heating bills down as well.”

“A reduction of approximately 25% in our gas consumption.

Martin Kelly – Facilities Manager - Traidcraft Plc

“We installed Airius destratification fans in our distribution department. Prior to this, **in winter the difference between temperatures at floor and roof level was approximately 5-6 degrees C**.

The difference now is approximately 1-2°C and has resulted in **a reduction of approximately 25% in our gas consumption.**”

“Not only can the thermostat temperature be lowered considerably but the heater itself kicks in much less.

Roger Hewlett – Production Manager - GD Laser Ltd

“With all that heated air now being pushed back down, **not only can the thermostat temperature be lowered considerably but the heater itself kicks in much less**.

Having burnt our way through 6,000 litres of oil in the first five weeks or so, the same heater assisted by Airius on average **now only uses about 3,000 litres – for the whole year!**”



“Your dealings with us from first contact after we got project approval have been exemplary

Phil Harris – Manufacturing Director - Glen Dimplex

"May I thank you again for your professionalism in the way you completed the contract for installation of 126 destratification fans at GDHA here in Prescot. **Your dealings with us from first contact after we got project approval have been exemplary.**

On meeting for the first time we got a good feeling about the way the installation project would be handled by Airius. This continued from your team through the five weeks of installation.

We would be happy for you to use this testimonial for reference with potential customers."

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“The temperature difference had improved from around 5°C to just 0.5°C.

Andy Pryer – Quality Manager - CT Production

“The units were simple and fast to install.

Were delighted to find that **the temperature difference between ground and roof had improved from around 5°C to just 0.5°C** proving their effectiveness."

.....

“A fantastic saving in heating costs!.

Paul Stewart – Health, Safety & Environmental Manager - Mondri Packaging

"Since filing the Airius destratification system in our storage warehouse **we have been able to maintain a constant and comfortable temperature** for our staff, whilst also being **able to switch one of our heaters off thus giving us a fantastic saving in heating costs!"**



“I would highly recommend Airius fans.

Leon Antone – Director - Black Hole Storage

"We purchased Airius fans for our self-storage company as we were having problems with condensation when there was a large fluctuation in temperatures.

After we installed them it completely solved our problem and we haven't had any condensation in over 4 years since we have had them. We keep them on 24 hours a day and they are very cheap to run.

I would highly recommend Airius fans."

.....

“It has made a difference.

Jonathan Gudorf – Facilities Manager - Practical Action

We installed Airius in our unheated storage building and **it has made a difference, noticeably taking the chill off and providing the necessary ventilation** without penetrating the roof structure."

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“The installation was of high quality.

Facilities Manager - Rolls Royce

"The Airius Electrical Contractors team installed 76 destratification fans in one of our sites in Filton.

They all conducted themselves impeccably and the installation was of high quality. **We were very impressed with their safe systems of work."**

Discover more

See our full list of 65+ customer testimonials on our website at **www.airius.co.uk/testimonials**

ArcelorMittal

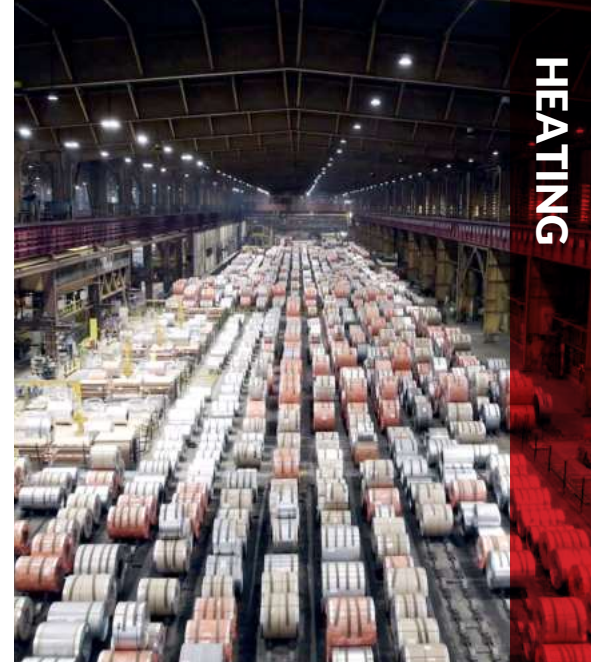
Shipping Hall & Raw Material Storage

ArcelorMittal installed the Airius destratification system to improve temperatures and reduce humidity in its shipping hall housing raw metal coil, with an estimated energy saving of 26%.

Following installation, they not only benefitted from an actual energy saving of 64%, but also improved product quality resulting in even further savings.

Key Points:

- **64% saving on energy costs**
- Significantly reduced humidity and rust
- Improved product quality
- Prevents moisture ingress through doors
- Fully integrated with BMS system
- Recycles heat from processes & machinery



Lush Cosmetics

Warehouse Facility

After achieving significant energy reductions at their factory facility with Airius, Lush Retail Ltd installed the Airius system in their warehouse in Poole, Dorset.

Originally it was estimated that this site would benefit from a minimum energy saving of 35%, however a far greater saving was achieved of over 60% following installation of the Airius system.

Key Points:

- **ROI = 18 days**
- 61% energy saving on heating system
- Significantly improved comfort
- Recycles heat from processes & machinery
- Also improves cooling during summer
- Airius rolled out across the Lush network



Knorr-Bremse

Warehouse Facility



Knorr-Bremse specified Airius to replace the existing box fan destratification system in their 8,000m² warehouse, which was loud, created unwanted dust clouds and did not provide maximised energy savings.

Conditions were immediately improved after installation and energy savings increased by 25% in comparison to the previous destratification system.

Key Points:

- **25% more savings compared to box fans**
- Significantly improved comfort levels
- Avoids creation of dust clouds
- Near silent operation
- Improved staff productivity
- Also benefits cooling during summer

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Genentech

Pharmaceutical Storage Facility



Genentech contacted Airius to address temperature regulation problems in their new 4,650m² pharmaceutical warehouse, where the HVAC system was not able to reach industry standard temperatures.

Following installation of the Airius system the warehouse passed all validation testing. It also opened up millions of pounds worth of additional inventory space.

Key Points:

- **Stratification reduced from 5°C to 1.5°C.**
- Passed all regulated requirements
- Balanced temperatures throughout
- All racking heights within temperature
- Simple integration with BMS system
- Avoided HVAC system redesign



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