AIRIUS: THE WORLD STANDARD IN SUPERMARKET COLD AISLES

I was at a presentation last week and was asked by a Mechanical Engineer 'How does the Airius Air Pear® compare to competitors in supermarket cold aisles?'

I have documented my detailed response below, where you'll discover:

- An executive summary from VIPAC in Melbourne summarising the **competitive advantage of Airius** fans over similar products
- The 5 most important questions to ask any destratification fan provider
- Which **major** supermarket chains **exclusively specify Airius units** to improve thermal comfort in their cold aisles
- Key performance metrics of destratification fans
- Why Airius designed their new **Retail Series specifically for supermarkets**
- How quiet the Air Pear is compared to their competitors
- Why Airius can offer an **extended warranty program** of 10+ years

Who Is the **Worldwide Market Leader** in Supermarket Cold Aisle Destratification?

The Airius Air Pear® is a patented air turbine, first engineered and produced over fourteen years ago by Avedon Engineering in the USA. Avedon has been developing custom products for industry over the past 54 years in its 15,000 square meter manufacturing/engineering facility.

Avedon developed the Air Pear out of necessity. The warm air put out by their heaters was simply rising up to the roof away from the workers. After a one-year pilot program where they saw 68.8% reduction in energy usage, Avedon founded Airius and began to manufacture the Air Pear exclusively.

The problem that Avedon's warehouses suffered from is called stratification. Bringing the warm air to the floor and making that area more comfortable is called destratification. Simply blowing warm air downwards using standard fan designs or ductwork is not going to solve the problem. Avedon tried that and it didn't work. Many others have come to the same conclusion.

The secret to destratification is the **patented Air Turbine design** Airius adopted for its efficacy.

The design of the Air Pear was engineered to effectively force the lighter warmer air through the denser colder layers lying at the floor and ensure the temperatures in the space were equalised. From an engineering and physics standpoint, this is a more difficult problem than it appears to be on the surface, as hot air is lighter than cold air and it tends to simply rise back up as soon as it's blown down.

The Air Pear's uniquely engineered, innovative solution achieves true destratification in spaces of all sizes, ensuring that heating energy is not wasted and thermal comfort is significantly improved.

HOW EFFECTIVE ARE AIRIUS AIR PEARS IN SUPERMARKET COLD AISLES?

One of the first major market areas Airius had high success rates in was the cold fridge aisles in grocery stores. They showed how they could improve thermal comfort without negatively impacting on fridge case performance. More comfort = more dwell time = more sales!

Airius units first went into supermarket cold aisles in late 2004 in the USA. Morrisons supermarkets in the UK rolled them out through their cold aisles in 2006—2008. As more data became available about the energy savings and thermal comfort benefits of destratifying, Airius made its way into delis, checkouts, and store-wide. The success of the Airius solution in supermarkets found its way to Europe, then to Australia, by 2011.

Most of our competitors didn't even enter the market until after Airius had achieved worldwide success.

Airius has an additional 8 years of experience and product knowledge that **competitors don't have**.

Supermarkets are now the largest market for Airius worldwide and Airius has by far the major portion of that market.

- In the UK and Europe, Airius is **The Only Destratification Fan** Used by Grocery Chains Such as Morrisons, Sainsbury's, The Co-Op, Marks and Spencer, Tesco, and Carrefour

- In the USA, Airius is **The Only Destratification Fan** used by the largest supermarket chains such as H-E-B, Meijer, Walmart, Whole Foods, BJs, Statler Bros, as well as numerous smaller and independent grocers across the country.

Airius has heard far too often the horror stories of grocery chains that tried other types of destratification technologies and later had to go through the inconvenience and cost of removing/replacing/decommisioning them when they realised how those units were impacting their cold cases, food quality, thermal comfort, and air conditioning. Those supermarkets now specify 'Airius only' for their destratification in both cold aisles and across their stores to reduce winter heat loads and improve thermal comfort.

If you can't afford to do it right, can you afford to do it again?

Above, Airius Air Pears installed in the Morrisons, UK Cold Aisles.
Below, Airius Air Pears installed in Australian supermarket cold aisles.

WHY ARE AIRIUS AIR PEARS THE MARKET LEADERS IN SUPERMARKET COLD AISLES WORLDWIDE?

Everyone knows how supermarket refrigerator aisles feel. Cold! Uncomfortably cold.

The key concern of all supermarket operators who want to improve the thermal comfort in their cold aisles is that some areas of the store - namely, the inside of the cold cases - need to remain stratified. Any air movement around the cold case will have significant negative impact on food quality, energy use of the fridge cases, and condensation. Apart from being unsightly, this condensation on the outside of fridges can also create slip hazards, introducing another type of risk to the supermarket owner.

These costs, or risks can be very, very costly...

- How many tens of thousands of dollars of food can be in one fridge case?
- What is the energy cost of a fridge running inefficiently multiplied by ten or twenty fridges a store?
- How much will a slip-and-fall lawsuit cost you in legal fees?

Also...

There can be a negative impact on the overall air-conditioning in the store if the destratification process is not correctly implemented.

This is certainly not something the supermarket operators and customers want.

Airius units, with their unique patented air turbine design, have been engineered and designed to ensure there is:

No negative impact on supermarket cold aisle refrigeration performance and product while improving thermal comfort.

To do this they provide:

- A more narrowly-focused column of air from the unit to the floor than any other product on the market
- Suitable amounts of thrust from the unit to gently force the lighter warm air through the denser cold air layers and down to the floor, even at low speeds. Effective low speed options, which only Airius can provide, are required in some cases to ensure no fridge air entrainment
- Very low noise to suit supermarket requirements.
- Up to half the energy use of competitors with similar air flow quantities
- Excellent reliability to ensure minimal impact on store operations
- Robust, solid design so the units won't suffer from impacts

It is this ability to put the air down in a narrow, focused column of warm air, improving thermal comfort with no negative impacts on cold storage, that makes the Airius Air Pear the World Standard for Destratification.

Why do other destratification solutions fall short?

Trying to force warmer air to the floor is not easy, and other similar looking products that don't have an engineered air delivery methodology will inevitably cause problems in cold storage. **All other fans** on the market destratify from the "top layer" whereas Airius destratifies from the "bottom layer" of stratified air.

Ceiling fans, bucket fans, box fans, and other destratification technologies all depend on mixing air nearest the ceiling first, eventually equalizing the temperature all the way down to the floor. This is their only option due to a lack of thrust and a wide area of discharge. The airflow output from other fans runs out of force and velocity as it reaches the colder, denser layers. **Eventually, other fans will begin to destratify your fridge cases - oops!**

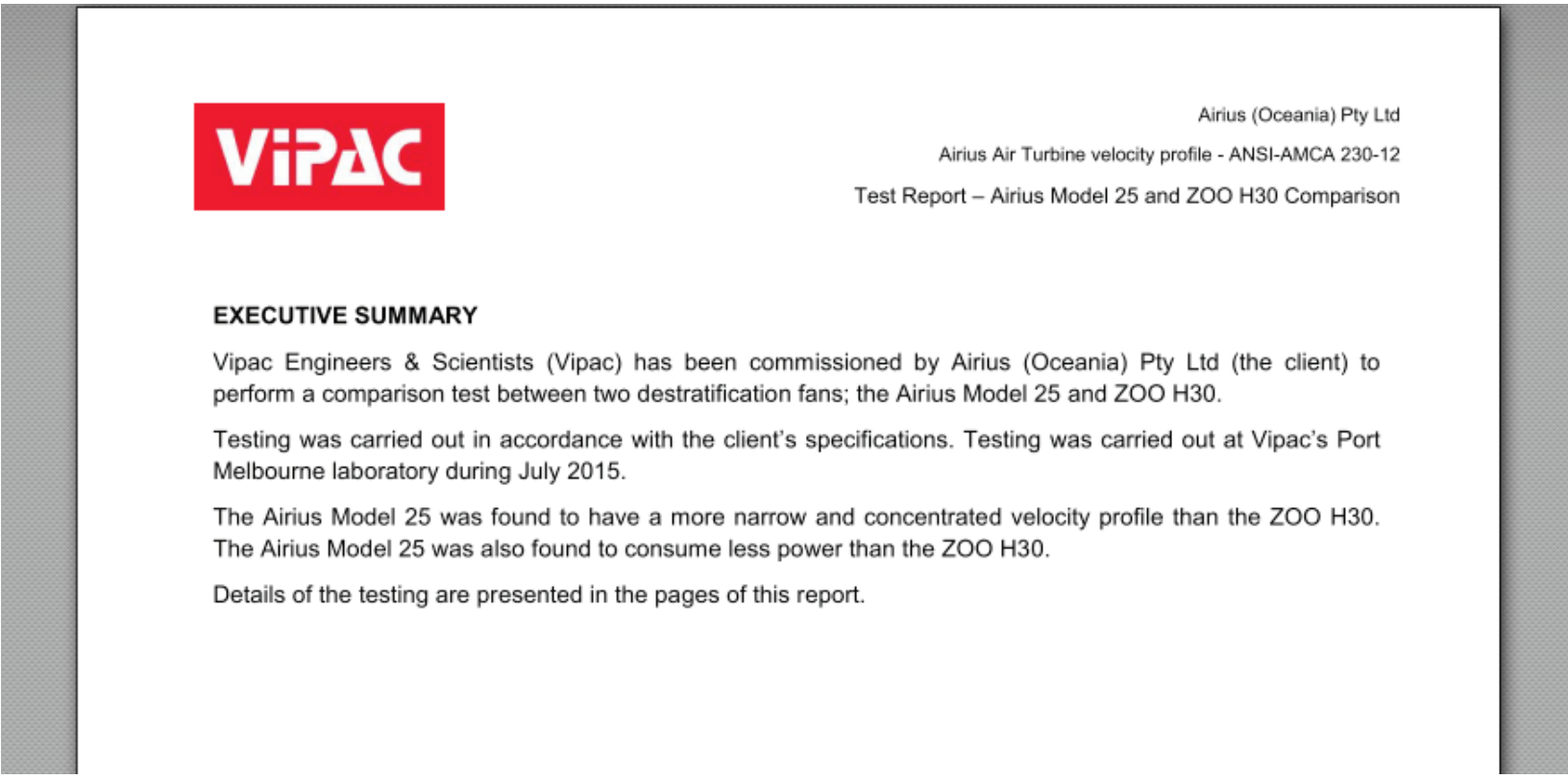
This has been the experience of supermarkets overseas who have tried cheap imitation products.

The Airius Air Pear destratifies from the floor level. The warm air forced down from the ceiling will land accurately on the floor between your cases, and the cold air sitting inside your cold cases will stay there.

Independent testing of Airius Air Pear and of one of these imitation units by engineers for Walmart and H-E-B in the USA and here by VIPAC in Australia, highlight the unique ability and value of the Air Pears in ensuring their narrow column of air flow is maintained right through the cold layers to the floor. And it's not a function of air speed or air quantity, it's a function of the thrust and air flow shape that only Airius' patented air delivery system provides.

This methodology ensures thorough air mixing so the cold aisles are more comfortable. And that is why Airius is the only product used in the major supermarket chains worldwide.

Below, VIPAC Executive Summary highlights the difference between an Airius Air Pear and a cheap unit.



ViPAC

Airius (Oceania) Pty Ltd

Airius Air Turbine velocity profile - ANSI-AMCA 230-12

Test Report – Airius Model 25 and ZOO H30 Comparison

EXECUTIVE SUMMARY

Vipac Engineers & Scientists (Vipac) has been commissioned by Airius (Oceania) Pty Ltd (the client) to perform a comparison test between two destratification fans; the Airius Model 25 and ZOO H30.

Testing was carried out in accordance with the client's specifications. Testing was carried out at Vipac's Port Melbourne laboratory during July 2015.

The Airius Model 25 was found to have a more narrow and concentrated velocity profile than the ZOO H30. The Airius Model 25 was also found to consume less power than the ZOO H30.

Details of the testing are presented in the pages of this report.

Why do major supermarket chains continue to specify Airius units over our competitors, even in light of the fact that their unit price is consistently cheaper?

Architectural differences

Some of the cheaper units on the market look similar to an Airius Air Pear. Quite a lot of these competitors also mimic the Airius marketing and the nomenclature of some of the units is also modelled on the Airius example.

Most inferior copy brands are available in a very limited type of unit, maybe just two or three models.

Airius offers a broad range of shapes, motor and control types, sizes, and colours/finishes. Over fifty models are available to suit every application from 2.5 - 39 metres high.

Airius has so much success in the grocery cold aisles market they have developed a range of architectural units specifically for that market. Known as the 'Retail Series' R20, or colloquially as the 'Duckbill' and 'Eyeball', these units perform and look great in a supermarket.

Development

Airius are continually improving their products and developing new ones. Every new product is engineered from scratch and all products are manufactured and assembled in-house, ensuring quality control over the product. As an example, the new 'Duckbill' and 'Eyeball' units cost over US $1.5 million and three years of work to develop from a concept to reality.

Airius work hand in hand with their motor suppliers ,including the world's leading fan motor manufacturer, EBM Papst, to tailor motors to suit their requirements. Airius is such a large purchaser of EBM Papst motors they assist Airius in designing motors specifically for Airius products. EBM Past motors are made in Germany (not in China under German fan company names as other products are.).

Other units on the market are manufactured by external companies, the parts just clipped together with minimal engineering input. Surely if just putting a fan in a tube (like the other cheap units available) works like an Air Pear, wouldn't Airius just do that and save themselves all the grief and cost of developing a unique air delivery methodology that's more expensive to develop and manufacture?

Product Design

Unlike other companies, Airius does all its own product design and engineering work. Airius' in-house engineers and manufacturing experts will ensure you receive the optimum product recommendation, as can only be developed after 13 years in supermarket cold aisles and more than fifty available fan models.

Other cheaper market copies are just that: copies. Fortunately, they can't copy the Airius worldwide patents, and so they can't deliver the same performance in air circulation that Airius does.

Service

When you buy an Airius product you get a premium quality, fully in-house manufactured unit.

Other products on the market are externally manufactured and then externally assembled. Could that be a recipe for poorer quality than an Airius unit?

With a market, leading warranty of 5 years' full replacement and another 5 year half-price refurbishment programme, Airius stands by their product for the long haul. Cheaper units offer poor quality warranties like "12 months' parts only replacement warranty."

What does that say about confidence in the product with a such a short and limited warranty? Or the quality?

With an Air Pear, if it breaks down inside five years from purchase, **Airius replaces it for you… no questions asked!**

The new Airius Retail Series Narrow Aisle and Eyeball Units, designed primarily for supermarkets and also their cold aisles.

System Design

Airius uses their expertise in air flow engineering and destratification to design your supermarket installation completely free of charge. They don't copy other company's layouts or use their spacings as other competitors do with the Airius designs.

Airius design every application specifically for you and work with you to ensure they supply what you want. Airius will attend your facility as needed to review installs, discuss issues on site with relevant team members, and assist however they can anywhere across Australia and Oceania.

How Robust are Air Pears?

Because Airius undertakes, in-house, all processes around designing and manufacturing their products, they can control the quality process from the beginning to the end.

This ensures you get the best assembled and manufactured item. Other inferior units on the market are just designed by a consultant, assembled somewhere else, clipped together in pieces, or poorly manufactured out of sheet metal. As the Airius units for supermarkets are a fully moulded, solid product they can withstand large amounts of physical punishment and operational abuse. This offers peace of mind and assurance that if any accident or impact happens to your Air Pear, it won't fall apart.

Imitations

Usually when there is a successful product in the market there are always imitations trying to cash in on the success of that product. Likewise, as Airius are so successful, a few copies have arisen. However, they are unable to replicate the Airius air delivery methodology or reliability, quality of manufacture, warranty or effectiveness that makes them so effective. Their unique air delivery methodology is patented worldwide. It can't be copied. However, some of the inferior products on the market mimic the look, marketing and promotions of Airius to

convince clients the products are the same or similar.

One of the cheaper inferior products recently on the market, spent a couple years rubbishing the Airius air delivery technology, yet now promote it as part of their offering. However, there is no difference in air flow performance between their old units and their new units. Trying to copy design and engineering without understanding how or why it works or knowing the nuances of the design detail, isn't a strong basis for a product.

Anyone can put a fan in a tube, and you'll **get the same outcome as other fans in tubes.**

Yes, the competing products may look similar to an Airius, but they deliver very different results.

No imitation product or different looking unit, however, can achieve the same performance outcomes, and provide the unmatched value as an Airius Air Pear. That's why the cheap copies don't make it in the critical areas of supermarkets.

Just take a look at the breakdown of differences between competitive products:

DESTRATIFICATION FAN COMPARISONS

Airius Jet Fans

+ Energy savings 20-50%
+ Destratification to within 1-3 C
+ Very low energy usage - 13 W+
+ Easy installation
+ Lightweight and unobtrusive units
+ Quiet operation (DBA tested)
+ BSRIA Tested
- Roof level installation

Low-Level Fans

+ Low-level installation
+ Energy savings 15-20%
- Only destratifies to within 5-15 C
- Extremely noisy
- High energy usage - 580W
- Large and heavy units: 35-95 Kg

Ceiling Sweep Fans

+ Energy savings 8-12%
+ Low energy usage
- Roof level installation
- Only destratifies to within 8-20 C
- Wide spread disperses airflow before it is effective

Overheaded Ducted Fans

+ Some airflow circulation achieved
- No energy savings
- Destratification not achieved
- Ductwork required

Overhead Shrouded Fans

+ Energy savings 8-10%
- Recommended installation at head height (ouch!)
- Only destratifies to within 8-20 C
- Insufficient airflow current to achieve full destratification

Caged Twin Assembly Overhead

+ Energy savings 10-12%
- Roof level installation
- Only destratifies to within 8-20 C
- Insufficient and too wide spread of airflow to achieve destratification

	Air Pear Model 10	Air Pear Model 15	Air Pear Model 25	"Fan in a Tube"
Power Use	12 watts	15 watts	31 watts	46 watts
Ceiling Height	2.5-3.5m	2.5-5.5m	5.5-8m	14m
Warranty (Aus)	5+5*	5+5*	5+5*	1 Year
Engineered Product	Yes	Yes	Yes	?
Motor Life	>45-60,000 hrs.	>45-60,000 hrs.	>45-60,000 hrs.	30-40,000 hrs
Patented design	Yes	Yes	Yes	No
Air Delivery	Column	Column	Column	No Column
Manufacturing	Moulded	Moulded	Moulded	Pressed
Rebuildable	Yes	Yes	Yes	No
Noise (full speed)	38 dB(A) 60Hz	44 dB(A) 60Hz	58 db(A) 60Hz	69 dB(A)
Noise (@ 1 m.)	30 dB(A) 60Hz	36 dB(A) 60Hz		61 dB(A)
Noise (@ 2 m.)	24 dB(A) 60Hz	30 dB(A) 60Hz	44 dB(A) 60Hz	55 dB(A)
AS 2107:2000	Compliance	Complaince	Compliance	No Compliance
Refund Policy	90 days	90 days	90 days	None
Motor Options	SP,EC,EL	SP,EC,EL	SP,EC,EL	Split Capacitor
Wireless-ready	Yes	Yes	Yes	No
Vertical Air Flow	150 l/s	191 l/s	216 l/s	316 l/s
Unique Models	>35	>35	>35	2
Short Model	Yes	Yes	Yes	No
Designer Model	Yes	Yes	Yes	No
Fitted Cord	Yes	Yes	Yes	No
Weight	4.1 Kg	4.1 Kg	4.1 Kg	6.8 Kg
Height (Standard)	410 mm.	410 mm.	410 mm.	539 mm.
Height (Short)	305mm	305mm	305mm	N/A

Sound testing was carried out at 60 Hz. The 50 Hz Power in Australia will reduce tested sound power levels by around 3 dB. For a clear visual explanation of the difference in performance and value between the competing fan and the Air Pear in heated, stratified spaces, contact Airius Oceania. *5 Year Warranty + 5 Year Refurb.

Ethics

Airius companies worldwide are known for their ethical approach. They won't copy others designs or products, marketing or publicity etc. Airius design and engineer all their products in house to suit what their markets demand. If a unit doesn't work Airius replaces it, no questions asked. For the first five years of use. Will other competitors do that for you?

Expertise

Airius is a company owned and run by Mechanical Engineers, not marketing people, school teachers or stockbrokers. They offer a full turnkey solution and can adapt their products to suit your needs as they manufacture everything themselves - except their motors.

Airius have a detailed and thorough understanding of destratification, air flow physics and air circulation. No other company in this market possesses that type of detailed knowledge.

As all development and manufacturing is undertaken in their factories in Longmont, Colorado, Airius know their product inside and out and can answer any questions you have around their products, air movement, destratification, applications, design, etc. Plus, they will work with you to quickly offer some manufactured changes to our products to suit your requirements if required.

Pricing

Regarding pricing, as always, the copy products are cheaper. No question there. You get what you pay for. However, if the copy units are cheaper and most of them are American companies, why are Airius the only Destratification fan specified in major supermarket chains in the USA…or the UK? Surely that's an important question?

13. MAINTAIN 10' CODE CLEARANCE BETWEEN EXHAUST FAN AND ANY OUTSIDE AIR INTAKE, OR ROOFTOP UNIT.
14. FAN TO BE PROVIDED WITH SPEED CONTROLLER. ADJUSTMENT KNOB SHALL BE IN ACCESSIBLE LOCATION.
15. PROVIDE THERMOSTAT TO ENERGIZE FAN.
16. FAN SHALL BE INTERLOCKED WITH PRE-PURGE BUTTON AND DOORS ON BBQ SMOKER TO ENERGIZE WHEN BUTTON IS PUSHED OR DOORS ARE OPENED.
17. PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR. AIRIUS ONLY.
18. FACTORY WHITE COLOR.
19. PROVIDE WITH TRIAC-120-5 SPEED CONTROL INSTALLATION HARDWARE, SAFETY CABLE, AND, ATTACHMENT HARDWARE.
20. SET BOTTOM OF FAN AT 16' A.F.F. ADJUST FANS AS REQUIRED SO AIRFLOW DOES NOT WASH OUT REFRIGERATED CASES.
21. SWITCH FAN WITH LIGHTS.
22. PROVIDE HANGING ISOLATOR KIT WITH FAN.

This is part of the specification for one of Americas largest Supermarket chains – 2/03/17. There are plenty more like this too.

Airius units will never be as cheap as the imitations… just like a Mercedes will never be as cheap as a Hyundai. However, in regards to supermarkets, economies of scale apply and if a large number of units are required, pricing of their Airius units drops significantly due to reduced freight and related charges.

As always with pricing of goods, you get what you pay for.

Ask yourself this: if the cheaper, inferior products, (with offices selling them in both the USA or the UK), are supposedly so effective (with large international company backing) and improved thermal comfort in supermarket cold aisles and other zones in the store is so important to grocery stores now, why is Airius the largest selling destratification unit used almost exclusively in all the major UK and USA supermarket chains? (as noted above)

Noise

Low fan noise is crucial in some applications ensuring there is no disruption to your facility. In other facilities such as warehouses it's not such an issue. Certainly though, in supermarkets, low noise is a key requisite.

This is another area where the Airius performance is unmatched. The unique Airius Air Turbine design allows the Airius Air Pear Fan to force the warm air through the cold layers sitting on the floor without spreading the warm air on top of the cold layers and causing numerous problems in the stores.

And the patented design enables the Air Pear to do it very quietly. At full speed!

And the air flow delivery design enables the Air Pear to still punch the warm air through the cold air at very low speeds too, making them even quieter. This is a more difficult to achieve yet Airius successfully does so worldwide in all sorts of applications including supermarket cold aisles.

The cheaper units in the market make a lot of noise to try and unsuccessfully push the air to the floor. Their air delivery method is usually just a fan in a tube with no air flow engineering implemented into their design.

Then to make them quieter to suit a supermarket, you turn the speed down, meaning even less air flow as well as directional force, and consequently less ability to push warm air down through the layers of cold and mix it.

The slower the air movement, the stronger the tendency for the air flow to spread out. **That doesn't occur with the Airius units.**

The Airius Model 15 Air Pears, commonly used in supermarket cold aisles where there are ceilings up to 5.5 metres high, have had their sound data independently reviewed in Australia by Day Designs Acoustic Engineers. Their report indicates the Airius Model 15 Air Pear has a sound power level of 44 dB(A) at full speed.

That's 37% quieter than the Sound Power Level of 69 Db(A) found in one of the cheaper units on the market!

AIRIUS AIR PEAR THERMAL EQUALISER
SOUND POWER LEVEL COMPARISONS

We are pleased to advise that we have reviewed the acoustical data for Airius Air Pear Thermal Equaliser Models A-10, A-15 and A25.

1.0 AIRIUS FANS A-10, A-15 AND A-25

The Airius fans circulate air to evenly distribute air throughout a large space. The fans are designed to hang from the ceiling and distribute air from heights as follows:

- A-10 – 2.5 to 3.5 metres
- A-15 – 3.5 to 5.5 metres
- A-25 – 5.5 to 8 metres

Tested noise data for the Airius Air Pear Thermal Equalisers have been provided by the manufacturer. The datasheets for the three fans are attached as Appendix A. The calculated sound power levels from linear third octave band sound pressure levels is tabulated as follows:

Table 1 Airius Fans

Fan	Sound Power Level (dBA)	RPM
A-25	58	1450
A-15	44	1230
A-10	38	980

Scientifically, 10 dB(A) higher is a doubling of noise. 25 dB(A) difference indicates the cheaper units are significantly louder than an Airius Unit.

The Day Designs report indicates that even running at 33% speed, which means even worse air flow production and control capability, the cheaper units are still 5Db(A) noisier.

See Day Designs Independent Acoustic Consultants Report. Or contact Airius for your full acoustic comparison report.

Airius units are never run at full speed in supermarkets making them even quieter again than any of the competition.

The Model 25, used in spaces up to 8 metres high, has a Sound power level of 58 Db(A) which is around 11 Db(A) quieter than one of the cheaper products too.

Again, that's a significant difference in noise.

Exaggerated claims

Unlike many competitors, Airius doesn't make any exaggerated claims about their product or performance. Airius units do what they say they do, nothing more or less.

For example, one competitor claims it can destratify spaces up to 14 metres high yet when tested independently both in Australia (Vipac) and the USA, (H-E-B) air flow performance at only 9 metres was zero. That's 5 metres of exaggeration.

Risk

So, what is the risk to the supermarket of putting in cheaper copy units?

1. Negative impact on fridge cases.
Fridge cases hold around 17% of stock value in a supermarket. That's a lot of money in stock. What will that stock cost to replace if the fridges overheat and the temperature rises above the 5 Deg C. required to keep cold food safe? $50,000? $100,000? And how long will it take in an overheated fridge for the food to not meet Australian Health Standards? One hour, two hours? You don't have a lot of time before its ruined.

2. Energy consumption increases.
If you have warm air blown into a fridge, apart from possibly ruining the food, it will make the fridges work harder, using more and more energy. And fridges use a lot of energy. The commercial refrigeration system is the biggest energy user within supermarkets, accounting for about 40 to 60 percent of electricity consumption (US EPA 2008a, US EPA 2008b). What will this cost your supermarket each day? Each week? Each year?

3. Condensation in fridge cases.
If you push warm air into your fridge cases you also create condensation. This may impact on the shopper's experience and perceptions, reducing sales, but it will also increase defrost and heater requirements. How much does this add to the operational costs of your supermarket?

4. Creation of slip hazards.
If destratification in a supermarket is poorly implemented, then air movement on the floor is poor. Poor air movement won't remove slips hazards created by spills or condensation. Good air movement will. What is the financial and reputational cost to a supermarket of customers suing them for slipping over and hurting themselves. Legal actions, poor publicity and high costs.

In one recent NSW legal case (2011), a customer successfully sued a major supermarket chain for $170,000.00 for slipping in a puddle on the floor in a refrigeration cold aisle.

5. Poor thermal comfort outcomes.
The reason destratification fans are being considered is to improve thermal comfort, which therefore increases dwell time in the cold zone and related sales. The overall supermarket experience is enhanced. How much will it cost you in sales if the thermal comfort is not improved and people stay 20% less? For instance, if 2,000 people a day walk through a cold aisle and you can get them to dwell three more minutes there because its more comfortable, and they spend one extra dollar, **that's a potential revenue increase/ loss of $20,000 per day.**

6. Impact on store of removal and replacement with a better-quality unit.
What will it cost you to remove and replace destratification units in cold aisles if they don't work or break down? How much will it cost for interference in operations, disruption to customers, and overall remove, replace and consequential costs? $20,000 a store?

7. High noise levels making the store uncomfortable to be in.
If you are aiming to improve thermal comfort in a store, why would you offer a high noise environment? Low noise and improved thermal comfort go hand in hand. If the area is noisy from the use of poor quality fans, then the improved thermal comfort will mean nothing as customers once again rush through the aisles escaping the high noise levels. Sales will drop again.

8. Higher energy consumption resulting in higher running costs
Remember the units run 24/7 generally. What is the long-term electrical cost of running destratification units?

If you have an electricity cost of 0.15c /kwh and you install 15 Air Pears Model 15s in a supermarket and run them at half speed 24/7 365 days per annum, (using 8 watts each at half speed) your annual running cost is $197.00 per store.

If you use a competing product, with all the same operational parameters, (using 23 watts each at half speed) your running costs will be $591.00 per annum; per store.

Multiply that by 800 stores and your running costs differences are as follows.

Airius Model 15 x 800 Stores	$157,600.00
Competitor x 800 stores	$472,800.00
Difference	**$315,200.00**

That's a 66% reduction in running costs and a savings of $315,200 per annum.

9. Lifecycle costs.
What is the financial cost of having to replace your units when they wear out? Supermarkets are facilities that open and operate every single day of the year. Often 24 hours a day.

Airius fans have a motor life of >45-60,000 hours. They are designed to run 24/7 all year, every year. That's at least 7 years constant running!

98% of Airius Air Pear units installed in 2004 are still running. Competing fans advertise their motor life as 30-40,000 hours.

So, every 4-5 years you may have to replace your cheaper units at your cost as they are also well out of warranty.

Example: If your 15 Air Pears cost, for example, $12,000 to supply and install and the cheaper competitor costs $9,000 to supply and install but breaks down and has to be replaced in 5 years, over a 7-8-year minimum life of an Air Pear you have had to replace the cheaper units 1.5 times.

That's supply and installs costs, removal costs and consequential costs x 1.5.

The initial cheaper $9,000.00 price, after 7 years becomes around $17,000.00; **$5,000.00 more than the Airius Air Pear price.**

And that doesn't include the running cost savings!

Opportunity

With risk comes opportunity however, in this case, the only opportunity achieved by using a cheap imitation destratifications fan, is short term pricing. What is the real cost of that?

The question to ask yourself is why am I purchasing a unit? What are the outcomes I am looking for?
And then make your decision based on that.

If you're buying a car for your family, you're not going to purchase the cheapest old bomb you can. You're going to look for safety, airbags, low maintenance, reliability, smoothness of driving, comfort... and instead of paying $2000 for a car, you might pay $15,000 - $60,000.

The real opportunity is in using the proven market leading destratification fan, the Airius Air Pear. Thermal comfort is improved while fridge cases are not impacted. Over the short, medium and longer term. Used internationally in supermarkets since 2004.

Don't Take Our Word for It – Before You Purchase Any Product, Ask These Questions:

1. Can you send me proof of which major supermarket chains use your product in the USA?

2. Can you send me proof of which major supermarket chains use your product in the UK?

3. Can you supply me with independent proof of how your product compares with Airius Air Pears in terms of noise?

4. Can you supply me independent proof of how your product compares with Airius Air Pears in terms of power consumption?

5. Can you supply me proof of how your product compares with the Airius warranty?

Remember, just because you may deal with a large international conglomerate, don't believe everything you're told. For instance...

VW scandal...

Enron scandal...

Drug recalls...

If you are an engineer or a supermarket owner wanting to learn more about how an Airius Air Pear can help you improve the thermal comfort in your cold aisles and ensure there is no impact on your fridges, while utilising the specialist knowledge Airius has in supermarkets to assist you in your facility, contact Airius as soon as you can at:

www.airius.com.au
sam@airius.com.au
Or call Sam Rochaix
M: 0406 585 402

Nobody ever got fired for buying an Airius.

AIRIUS®
The World Standard
For Destratification