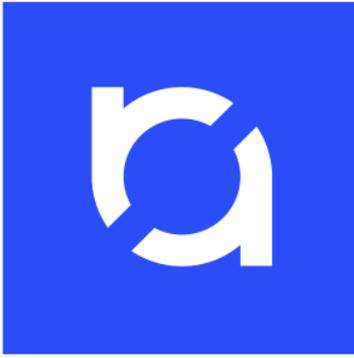


# Product Information Document



**BASE AIR**



## Table of Contents

01	What is Base Air™?
02	The Working Principle of Base Air
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# 01

## What is Base Air™?

Base Air™ is an advanced method of pressure-control  
for air suspension.

Winner of the 2023 Heavy Vehicle Industry Australia's  
(HVIA) Safety Innovation Award, it has since been  
implemented in dollies, caravans, agriculture equipment,  
and light-duty SUVs. The technology redefines typical air  
suspension, fundamentally improving performance and  
safety.

[Watch how the system works here.](#)



Originally designed for heavy haulage, Base Air allows vehicles to operate between single and dual-circuit air suspension as required.

Reduced vibration, and improvement in load-share, results in reduced freight damage, tyre-wear, fuel consumption, Electronic Brake System (EBS) intervention, and driver fatigue.

Base Air integrates into \*any vehicle's existing air suspension system, and is also available factory-fitted from select Australian providers. The nearest accredited Base Air installation partner can be found [here](#).



**\*\*20-30% reduction  
in tyre-wear**



**Reduced driver  
fatigue**



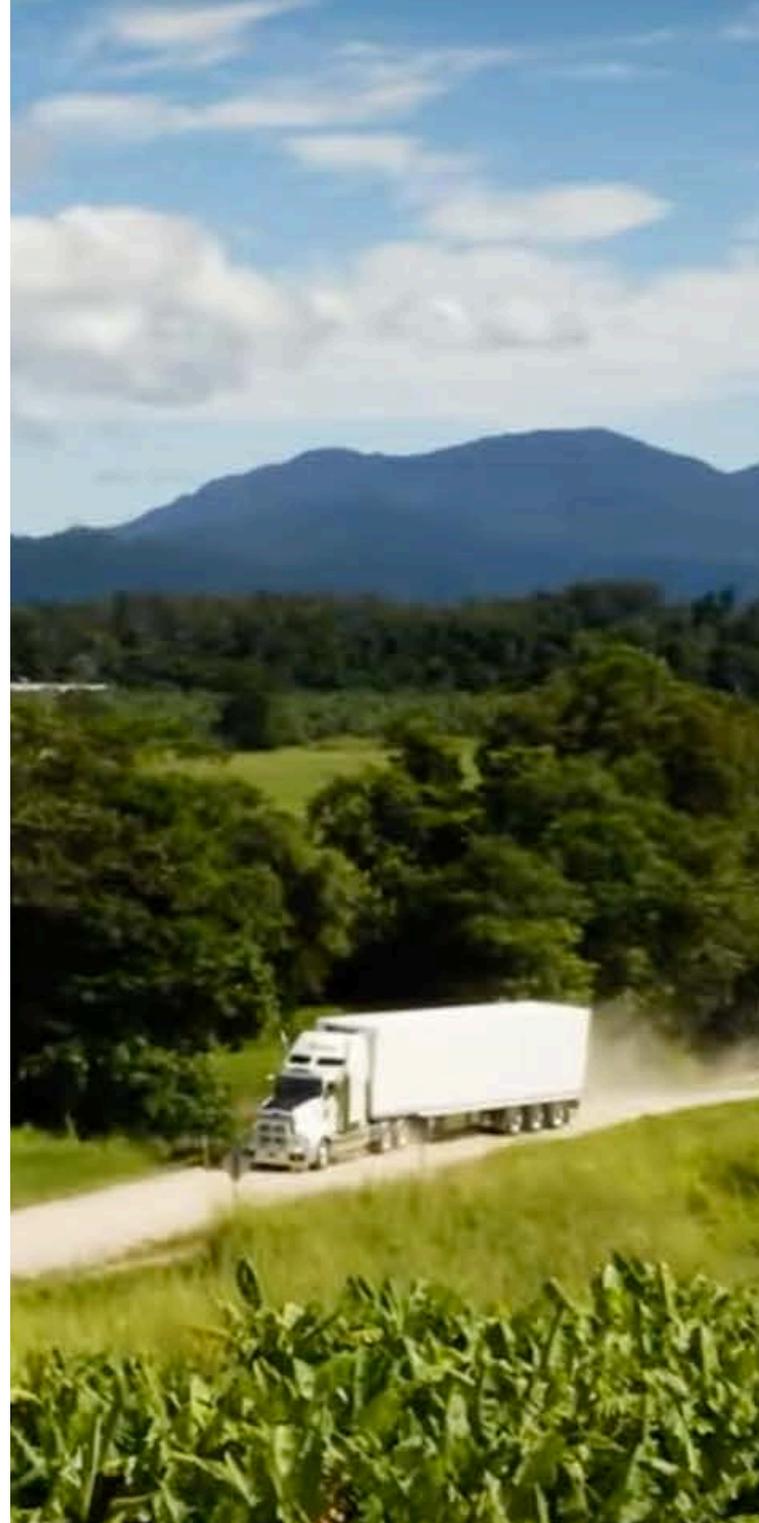
**Reduced freight  
damage**



**\*\*1.4 - 5.0% reduction  
in fuel burn**

\*Base Air is currently not applicable on vehicles fitted with electronic HCVs (Height Control Valves).

\*\*Data available for heavy-vehicles only, recorded in 2024 U.S.-based testing and Australian private fleet testing



For the braking impacts, watch here.



# 02

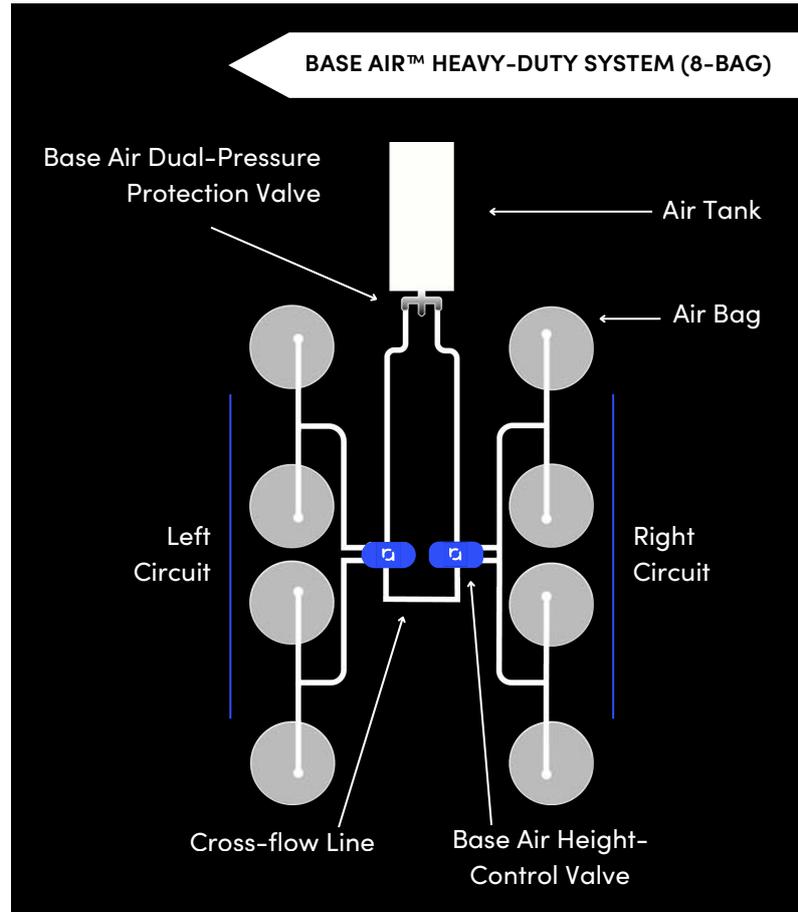
The Working  
Principle of Base  
Air



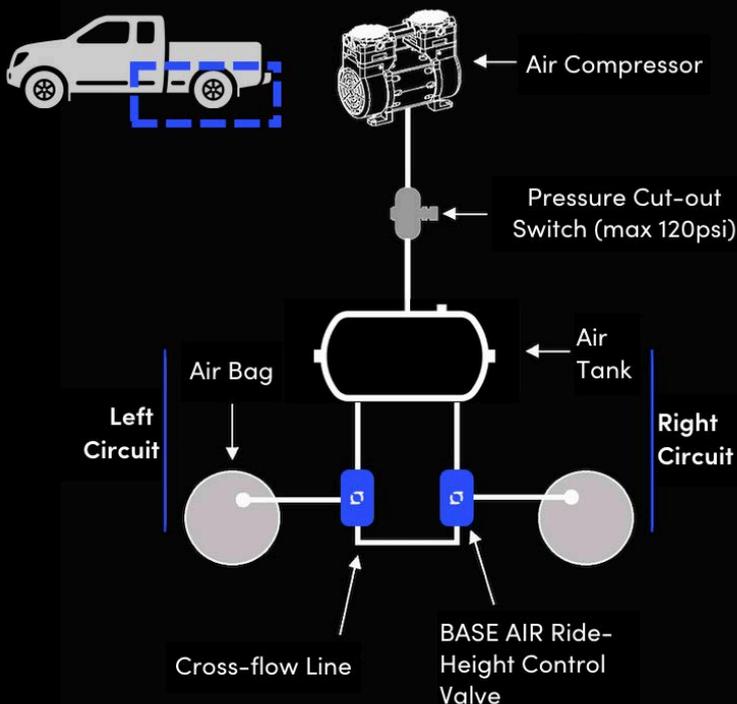
## Two Circuits : One System

Loadings vary on each side of a vehicle in response to conditions; the road from below, the load from above, and the forces from turning, all vary constantly.

Single air circuits with one HCV must find one pressure to suit all springs under different conditions, while these conditions are constantly changing.



### REAR-AXLE BASE AIR™ FOR LIGHT-DUTY VEHICLES



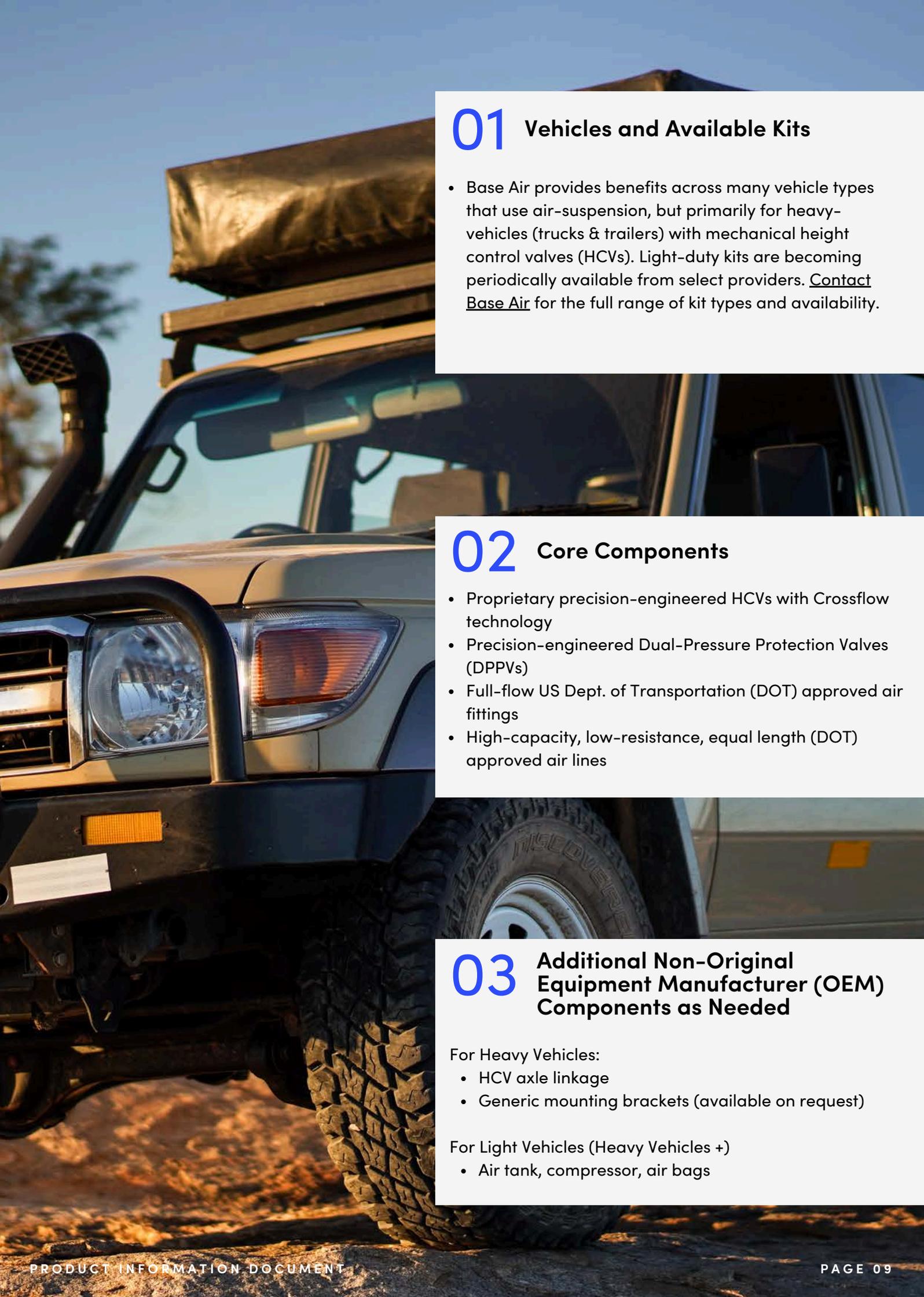
Base Air uses two HCVs to create two air circuits - one for either side of the vehicle - by dividing the total number of air springs into two sets. This allows for the appropriate pressure to be maintained for each set of springs, across differing conditions.

What the driver feels becomes more consistent and predictable. Less steering correction is necessary to maintain the driver's intended path, so the driver reaches the end of a journey less fatigued, with less tyre-wear and less movement that can damage freight.

Selective combining of the two circuits under steady conditions via the Cross-flow line then provides more uniform load share.

# 03

Applicable  
Vehicles, Core  
Components &  
Distributors



## 01 Vehicles and Available Kits

- Base Air provides benefits across many vehicle types that use air-suspension, but primarily for heavy-vehicles (trucks & trailers) with mechanical height control valves (HCVs). Light-duty kits are becoming periodically available from select providers. [Contact Base Air](#) for the full range of kit types and availability.

## 02 Core Components

- Proprietary precision-engineered HCVs with Crossflow technology
- Precision-engineered Dual-Pressure Protection Valves (DPPVs)
- Full-flow US Dept. of Transportation (DOT) approved air fittings
- High-capacity, low-resistance, equal length (DOT) approved air lines

## 03 Additional Non-Original Equipment Manufacturer (OEM) Components as Needed

For Heavy Vehicles:

- HCV axle linkage
- Generic mounting brackets (available on request)

For Light Vehicles (Heavy Vehicles +)

- Air tank, compressor, air bags



Base Air™ is available via PACCAR Parts (Australia), through an expansive dealership network.

Base Air is also available for Light-Duty vehicles via TUFF Australia



04

Intellectual  
Property

BASE's technological platform includes proprietary integrated systems, valves, control units, and other system components developed through sustained research, development, problem solving, and collaboration with BASE's intellectual property (IP) attorneys.



Transform Your Vehicle

**BASE AIR**

Revolutionise Your Driving Experience

# Our IP includes



**Air management systems for all vehicle types.**



**Proprietary mechanical valves that are only available via Paccar Parts and Base Air.**



**Proprietary electronic valves that are not available off the shelf.**



**Methods, systems, and devices for controlling vehicle stability.**



**Proprietary system control units for electronically controlled air-management systems**



**Designs of valves, valve components, and other system components.**

For updated patent information, please visit [here](#).

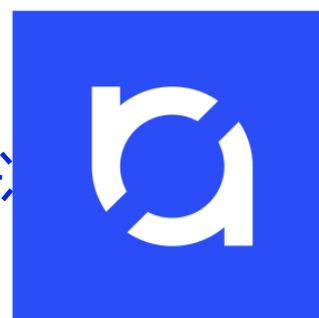
# Our Technology includes



Mechanical Systems

Electronically Controlled Systems

Integrated Systems – for compact design, protection from environmental elements, and noise reduction



05

Awards and  
Testimonials

The Heavy Vehicle Industry Australia (HVIA) declared Base Air as the Winner of its prestigious Safety Innovation Award for 2023.

Held at HVIA's National Gala Awards in Brisbane, Queensland, the judging panel of industry experts determined Base Air to be the most impactful safety technology on Australian roads for that year, out of a pool of six finalists.

Base Air was also recognised as a finalist in the separate Product Innovation category, with HVIA labelling the unit as an "ingenious air suspension pressure-control system".

More on HVIA's 2023 National Awards can be found [here](#).





BASE has produced high-quality video testimonials documenting its continued engagement with Australian trucking fleets.

Please visit the [Base Air YouTube](#) page for a variety of testimonials, including How-It-Works.

For the latest display of the Base Air system fitted across an entire Super-Triple tanker combination, please [WATCH HERE](#).





## “The Aces of Base Air”, by Steve Brooks



## “Keeping Trucks Upright”, by Tim Giles



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# BASE AIR

BASE AIR GLOBAL PTY LTD  
ABN 97 653 131 983