

Automation Components
Robot Grippers
Custom Components
Vacuum Conveyors

### TecnAir—Your Automation Partner

In Australia we've been supplying pneumatic components, control systems and solutions for over 20 years.

We've expanded our offer to include vacuum components and vacuum conveyors and now have extensive experience in this field.

Working with industrial automation users led to us building robot gripper heads, fixtures and small special purpose machines as our clients demanded turnkey solutions rather than just components.

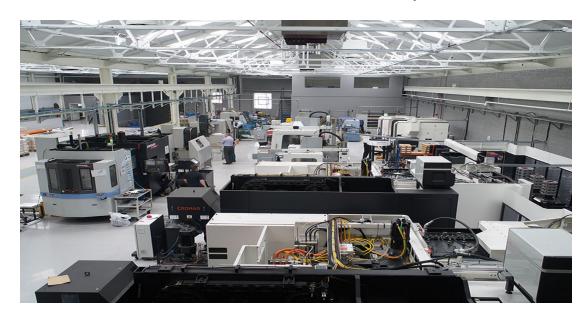
Together with our UK division we acquired an Italian company that manufacture specialised pneumatic & hydraulic components so a decision was made to group all the individual companies together under the TecnAir name.

Extensive industry experience allows us to develop and manufacture innovative solutions in conjunction with our sister companies and local suppliers.

### Why choose TechnAir?

Extensive industry knowledge and experience
In house design and manufacturing
Innovative design solutions
Small enough to care but big enough to make a difference
ISO 9001 accredited

### Customers turn to us when others fail. Don't delay, contact us first!





## TecnAir—Component Supplier

With our background in pneumatics we still carry a comprehensive range of pneumatic components in stock for quick delivery.

Pneumatic cylinders are kept in kit form and cylinder rod and barrel are machined in-house and assembled under the ISO 9001 Quality Standard. Local manufacture means we can quickly provide non-standard strokes, rod threads mounting etc. as required.

We also carry Piab vacuum equipment in stock and can source parts quickly for non-stock items.



Cylinders, valves, polymer and metal fittings, air service units, tubing, process valves etc. all stocked.

As well as a standard range we also have unique products such as telescopic cylinders, large vacuum valves, over centre clamps, 316 stainless cylinders and much, much more.



### Vacuum

TecnAir have an extensive range of energy efficient vacuum generators, unique vacuum cups for handling difficult products, grippers for collaborative robots, foam pad grippers, bag grippers and vacuum conveying systems.



Our team have extensive experience of handling difficult materials such as liquid in bags, porous materials, timber etc.





We install dust controlled vacuum conveyors that can be FDA approved and Ex rated. Ideal for safe reliable transfer of powders, tablets, and any dry product. Multiple installations throughout Australia in many different industries make us a leader in this field.

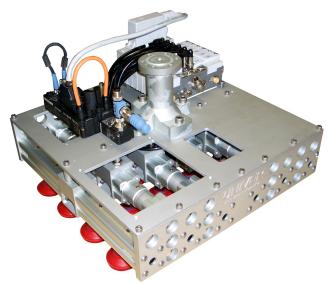


# **TecnAir Solutions—Robot Grippers**

Experience with vacuum products has led TechnAir to manufacture and build robot grippers for handling boxes, sacks, liquid filled bags etc. We supply both end-users and system integrators and carry out extensive trials to guarantee that the gripper works first time every time.

Depending on the application the gripper could use vacuum, magnetic or mechanical operation.

We can include pallet gripper arms, two-wire communications to banks of solenoid valves for zoning and integrated vacuum generator cartridges to reduce untidy pipework.



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Specialised cups allow us to easily handle liquid filled bags, soft pouches, oily metal plus we have direct food contact cups that are metal detectable.

We make heads for Delta robots that have the vacuum generator cartridge and valves integrated in a single compact unit.

As Collaborative robots become more common we can supply a head that is light weight and includes the generator, valves, a display etc.



For handling delicate products a soft gripper has been launched.



Whatever your gripper needs TecnAir will have a cost effective solution that will integrate directly with your existing robot.

Contact us to find out more.



# TecnAir Solutions—Special Purpose Equipment

Extensive experience with industrial automation applications has led to us designing and building small special purpose machines, jigs, fixtures etc.

We have our own in-house design team plus a comprehensive workshop so much of the manufacture is carried out in-house. Together with a network of suppliers, our sister companies and local craftsmen we can take on all types of applications.

From assembly machines, packaging machines, test rigs, depositors, vacuum lifters, lecture stages, and balloon inflators we've delivered a wide & varied range of solutions. If it's outside our scope we have companies we work closely with who can supply part of the solution ready for us to integrate, commission and test. This means you are dealing with a single point of contact and we project manage the whole solution for you.

At each stage of the process we keep you fully informed and the solution is manufactured under ISO 9001 accreditation.











## TecnAir Solutions—Transport

A long association with the transport industry and a strong understanding of the ADR's relating to brake systems has led to us developing some unique transport safety solutions.



### Anti Dock drive away system

Originally developed for fuel delivery vehicles this system is now incorporated in delivery vehicles for a major supermarket chain.

Once the park brake is applied and the roller shutter door is opened the trailer brakes are locked on. It's impossible to tow the trailer away without shutting the door then applying and releasing the park brake. The system becomes 'dormant' when the vehicle is moving so there is no chance of accidental application of the trailer brakes.

Since installing the system there has not been a single unsafe drive away from a loading dock!

### **Handbrake Interlock**

This system checks a number of sensors including a radar speed sensor and applies the park brake if certain conditions are not met. No unsafe roll-away if the driver forgets to apply the park brake but the system is 'dormant' above a speed of 5KPH.

### 3-phase disconnect

Using a similar system to the anti dock drive away system, this locks the trailer brakes on refrigerated vehicles while they are connected to a 3-phase supply overnight. No unsafe drive-offs, no expensive repairs to electrical power boards and improved safety.

#### Remote Shutdown

TecnAir have developed a system to override a truck braking system remotely.

The concept is that if a vehicle is stolen a GPS tracking device gives out it's position and when considered to be in a 'safe' location the brakes can be remotely applied in a gradual manner.

TecnAir have developed many other transport safety systems for gas delivery vehicles, fuel tankers etc.

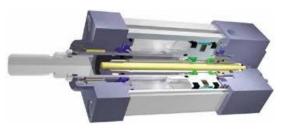


## **TecnAir—Special Products**

### Pneuma-Hydraulic cylinder

Pneumatic cylinders are often difficult to control smoothly at low speeds which causes problems in some applications. A 'low-tech solution was an 'air-over-oil' system where compressed air was used to pressurise reservoirs of oil which then operated the cylinder. Unfortunately air-over-oil solutions are messy, difficult to fill and never work well but many suppliers still offer them.

TecnAir manufacture a range of cylinders with a hydraulic damper along their centre axis, actually incorporated inside the piston rod. Controlled pneumatically they move smoothly at very low speeds and can be stopped mid-position using the hydraulic damper. Because oil is non-compressible the cylinder when stopped cannot be moved.



An interesting application is on military vehicles. If a military truck rolls on its side it's almost impossible to open

the door upwards due to the armour plate.
TecnAir developed a door locking system and
also a door opening system for use on military
vehicles.





Working closely with our clients we've developed unique solutions which are sometimes 'exclusive' and sometimes find their way into our standard product range.

From unique valves and sub-assemblies to integrated pneumatics where multiple components are mounted in a common housing to reduce pipework and assembly time. From automatic building fire vents to a valve manifold assembly for tipper trucks.

Whatever your needs speak to us first, if we haven't already developed something we can produce a conceptual design and costing for your unique application.





TecnAir Pty Ltd 11 Nicole Way Dandenong VIC 3175 (03) 9793 0377

Email: sales@tecnair.com.au

 $\label{thm:conditional} \mbox{TecnAir is the trading name of Univer Pty.Ltd.}$ 

