Pneutech

ALU AIR

Compressed Air Reticulation

A LIFETIME INVESTMENT...

Pneutech not only provides guaranteed compressed air to a quality that meets and exceeds your expectations, but also takes responsibility for your compressed air system and will stand behind its operation and performance for as long as you require it.

With major distribution centres, strategically positioned in 5 corners of the globe, Pneutech will assess, measure and record your particular compressed air requirement and provide a global input solution tailor-designed to suit your operation. With decades of internationally combined expertise, the Pneutech compressed air experience will bring you a sound lifetime investment and most importantly complete peace of mind.

THE PNEUTECH GROUP STATEMENT

"With such international connections, the Pneutech Group has the performance and integrity that only comes from personal commitment combined with global resources, to provide a truly innovative and flexible solution for your application."

170 YEARS IN THE COMPRESSED AIR INDUSTRY • 170 YEARS

With over 170 years combined involvement in the compressed air industry, Pneutech bring unparalleled knowledge and experience. From spinning spanners to air management programming, from changing filters, to design-and-build complex compressed air systems. Pneutech has done it all.

GOLD GUARANTEE

The unparalleled Gold Guarantee provides you with complete peace of mind for your Alu Air pipe system, for a period of 10 years*

*Conditions apply - see Gold Guarantee

... AND PEACE OF MIND

Pneutech ALU AIR reticulation piping series come with an industry leading standard 10 year guarantee...

NO ONE EVER REGRETTED BUYING QUALITY

The essence of a good compressed air investment is regarded as "lifetime cost". Lifetime cost is a combination of initial capital cost, energy cost, maintenance costs and any other associated remedial costs, all added together over the lifetime of the system. It is no surprise that Pneutech Alu Air reticulation system provide among the lowest of lifetime costs when compared with equivalent systems in todays industry.

Remember: "The bitterness of poor quality remains long after the sweetness of low price has been forgotten"

WHY USE ALU AIR COMPRESSED AIR PIPING SYSTEM?

The correct installation of the Alu Air compressed air reticulation system will bring the most effective compressed air transfer to your factory, by increasing the energy efficiency of the air supply, increasing productivity and reducing downtime and maintenance costs. In fact, like plumbing is required to reticulate your water services, air piping is a necessity for an effective compressed air supply.

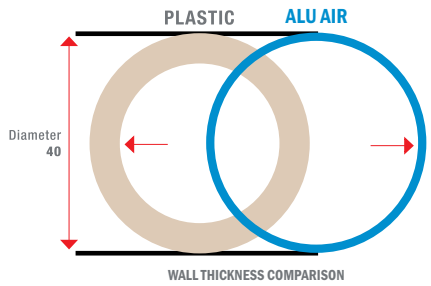
As used for modern aircraft, large water craft, quality vehicles and so many other items demanding top performance and longevity, the properties of aluminium provide superior durability, and corrosion resistance.

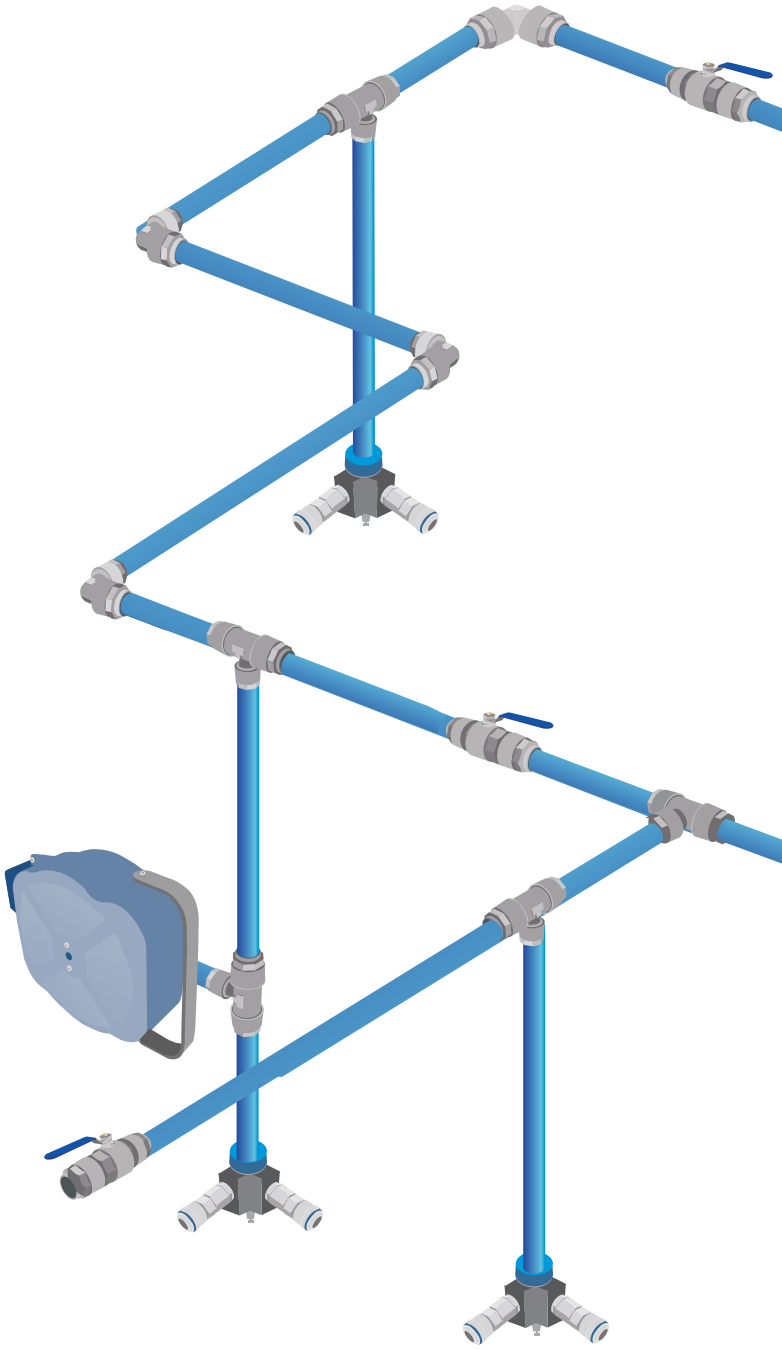
The Alu Air pipe system provides the ultimate compressed air reticulation, with a high performance, long lasting and reliable solution.

. . . AND 11 SUPERIOR REASONS...

1. HIGHER AIR FLOW

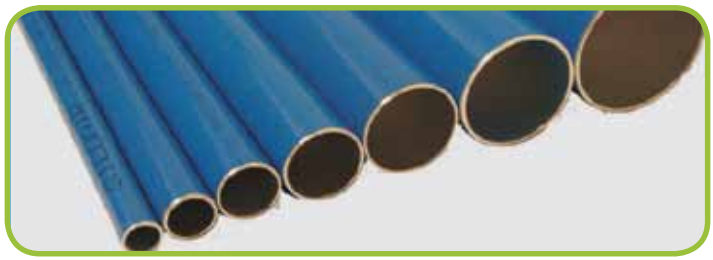
The thin walled pipe construction makes for very high air flow rates and when compared to poly pipe will transfer up to twice the airflow for the same outside wall diameter.





11. RUST-FREE

With a tough anodised coating , the aluminium pipe is good for both interior and exterior use, and unlike black or galvanised pipe will not build up an air restricting crust of rust over time. In fact Alu Air, will naturally form a protective oxidation layer internally, making it impervious to further corrosion.



10. PUSH-ON FITTINGS

The piping utilises lightweight and strong nylon or aluminium push-lock style fittings, which can be disassembled and reused at any point down the track. This means the system can be very simply extended, altered, or completely dismantled as is so often the need with changing compressed air requirements.

9. DOUBLE LOCKING CLAMP

The alloy fittings feature a double lock clamp system, ensuring the strongest connection, and for pressures up to 40 bar.

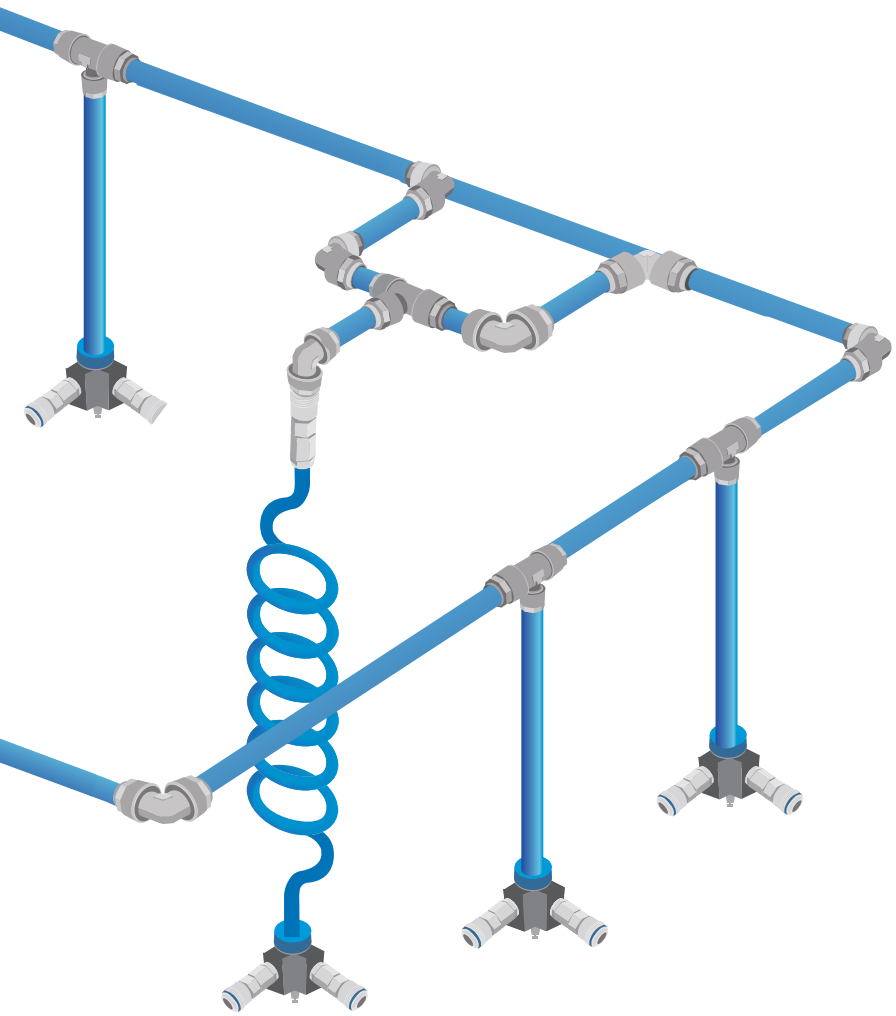
8, ADD TO SUIT LATER

The saddle clamps are designed to be added to the piping system at any point, enabling a dropper or extension to be fitted at a later point to suit changing requirements.

TO CHOOSE ALU AIR...

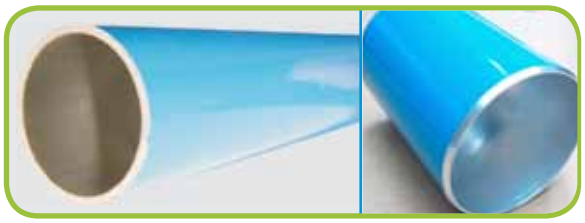
2, FIRE PROOF

The Alu Air metal fitting range has a melting point of 600° C, making it very resistant to fire damage.



3, LARGE ENERGY SAVINGS

The smooth internal wall creates very little resistance, reducing pressure drop to an absolute minimum, which increases the flow efficiency and leads to significant energy savings, especially with larger compressed air set-ups.



4, RIGID WITH MINIMAL SUPPORT

The aluminium piping is both lightweight and exceptionally rigid, requiring less than half the usual supports as needed by equivalent piping systems.

5, NO WATER COLLECTING SAGS

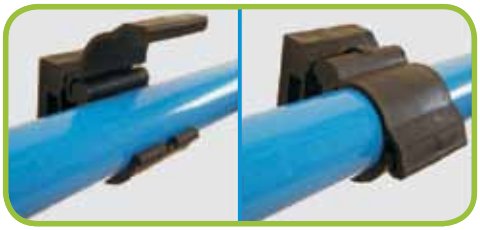
There is no risk of sagging (and resulting water accumulation,) and even in adverse climates of -20°C to 100°C the Alu Air stays as you hung it - dead straight .Alu Air aluminium piping can be hung by a single installer saving expensive labour charges.

7, LARGE RANGE

With sizes ranging from 20mm up to 160mm the Alu Air range can suit flow up to 6000cfm and suit down to a small workshop application. Alu Air piping is available to reticulate inert gases, water and oil.

6, FAST & EASY INSTALLATION

The new Alu Air aluminium piping can be easily installed in less than half the time required by other piping - and without the need of professional labour. No special tooling is required, no welding and no glue. The aluminium tube is simply cut to length by a tube cutter, and fastened to framing, walls, and concrete by support brackets.



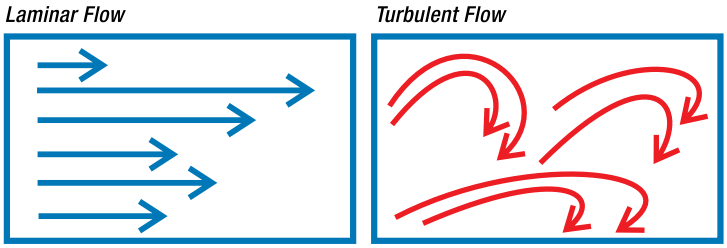
CORRECT INSTALLATION ....

WHAT SIZE PIPE IS REQUIRED?

The most overlooked area in piping layout and design is the speed at which the compressed air travels. Under sizing the diameter of the pipe system will often lead to increased velocity.

High velocity can significantly contribute to:

- Back pressure
- Irregular pressure control
- Turbulence in the system
- Excessive pressure drop
- Additional energy and maintenance requirements



Every pipe creates a certain resistance to the air flow. This resistance has to do with the inner surface of the pipe, its internal diameter, the flow velocity, and to the overall length of pipe.

The pipe sizing chart allows you to determine the correct diameter of the ring main compressed air pipe system.

- 1. Choose the flow rate of the compressor in the left hand column
- 2. Choose the distance from the compressor to the furthest outlet in the right hand column
- 3. Cross the lines of both columns to choose the correct diameter pipe

CORRECT PIPE SIZING TABLE up to 63mm

FLOW VLOUME			COMPRESSOR DISTANCE TO FUTHER MOST OUTLET										
Nl/min	Nm3/h	cfm	25m	50m	100m	150m	200m	300m	400m	500m	1000m	1500m	2000m
230	14	8	20	20	20	20	20	20	20	20	25	25	25
650	39	23	20	20	20	20	25	25	25	25	32	32	32
900	54	32	20	20	20	25	25	25	32	32	32	40	40
1700	72	42	20	20	25	25	25	32	32	32	40	40	40
1200	105	62	20	25	25	32	32	32	32	40	40	50	50
2000	120	71	20	25	32	32	32	32	40	40	40	50	50
2500	150	88	25	25	32	32	32	40	40	40	50	50	50
3000	180	106	25	32	32	32	40	40	40	40	50	50	63
3500	210	124	25	32	32	40	40	40	40	50	50	63	63
4500	270	159	32	32	40	40	40	50	50	50	63	63	63
6000	360	212	32	40	40	40	50	50	50	63	63	63	63
7000	420	247	32	40	40	50	50	50	63	63	63	63	110
8500	510	300	40	40	50	50	50	63	63	63	63	110	110
12000	720	424	40	50	50	63	63	63	63	110	110	110	110
15000	900	530	40	50	63	63	63	63	63	110	110	110	110
18000	1080	636	50	50	63	63	63	110	110	110	110	110	110
21000	1260	742	50	63	63	63	63	110	110	110	110	110	110
26000	1560	918	50	63	63	63	110	110	110	110	110	110	110
31000	1860	1095	63	63	63	110	110	110	110	110	110	110	110

EQUALS HAPPY CUSTOMERS...

'Industrial Air Systems NZ, supplied a complete Pneutech compressed air system to our Timaru based structural steel manufacturing site in August 2012. 'We have had the Alu Air aluminium piping system coming up three years now, and it has proven to be efficient and reliable throughout our 4200m² workshop.

We would recommend this compressed air reticulation system to any company requiring a premium set up.'

– Structural Steel Company

'Industrial Air Systems installed the Alu Air piping system into our new animal supplements manufacturing facility , and it has worked extremely well, providing consistant air supply to all areas of our busy production . Alu Air looks good, is leak-free and gives high effective air flow, and we recomend it.'

– Animal Supplements Manufacturing Company

'After exploring all the options regarding an air reticulation system for our new 6000 m2 manufacturing facility in Christchurch, we decided to enlist Industrial Air Systems to install their Alu Air compressed air piping system. The system incorporates pipe sizes from 25 mm to 63 mm, with approximately 30+ branches feeding our machines.

We used this system because Alu Air facilitates high flow rates, minimum pressure drop, minimal turbulence and offers corrosion resistant properties. Installation was no fuss and we now have a leak free system for many years to come.'

– Plastic Manufacturing Plant

'Industrial Air Systems installed the Alu Air aluminium compressed air piping system into our new commercial tyre shop, and it has worked a treat. Our demanding ¾" impact guns get plenty of air supply, while all work points have sufficient and even compressed air flow to them.

We recommend Industrial Air and Alu Air piping as it hangs very straight, does not corrode, and is easily adapted at any point to suit workshop changes.'

– Commercial Tyre Shop

TECHNICAL CARACTERISTICS

Some Technical Caracteristics	Air	H20/ N2	Fire	Vac	Air /HP	Oil/HP	H2O/HP
Standard Colour	RAL 5012	RAL 6018	RAL 3000	RAL 7046	RAL 5017	RAL 8007	RAL 6032
Max Working Pressure	16 Bar	16 Bar	16 Bar	-0,87 Bar	70 Bar	70 Bar	200 Bar
Plant testing pressure 1 hour at 20°C	24 Bar	24 Bar	24 Bar	24 Bar	105 Bar	105 Bar	300 Bar
Quality testing pressure 1 hour at 20°C	64 Bar	64 Bar	64 Bar	64 Bar	280 Bar	280 Bar	400 Bar
Production tested Pressure	1%	1%	1%	1%	100%	100%	100%
O.Ring & Lip Gasket Material	NBR 65/75 S.A.	NBR 65/75 S.A.	NBR 65/75 S.A.	NBR 65/75 S.A.	NBR 65/75 S.A.	NBR 65/75 S.A.	NBR 65/75 S.A.
Contiuous Service Temperature Limit	-20°C a 100°C	-50°C a 150°C	-50°C a 150°C	-20°C a 100°C	-20°C a 100°C	-20°C a 100°C	-50°C a 150°C
Aluminium Pipe Mechanical Resitance	Accourding to EN-7554-2/2008 Standards						
Pipe Material	Aluminium alloy EN AW 6060 - TS accordng to EN 755-2/2008						
Pipe Thickness mm	D20-S1,0 - D25-S1,1 - D32-S1,2 - D40-S1,3 - D50-S1,4 - D63-S1,8 - D90-S2,0 D110-3S,0 - D140-S3,0 - D160-S4,3						
Aluminium Fitting Material	Aluminium alloy EN AW 6061 - T6 ENAB 42000						
Clamp Ring Material	AISI 304 Stainless Steel						
Threads Standards	NPT - National Pipe Thread Taper - ANSI B1.20.1						
Pipe Surface Treatment	Polyester resin coated						

PneuTech GROUP

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