





Simply stated there is no equal. 'Elevation' from Applied System Technologies (AST), has taken large diameter piping systems to a new level.

Ten times lighter than steel, without compromising any structural strength, the system is easier to install than plastic and delivers a quality of air, gas or vacuum that is equal to that of high cost welded stainless steel systems.

The secret of the Elevation system is twofold. First is the tubing design. Elevation is manufactured from marine grade aluminum that affords it the highest level of protection against contamination. This ensures that the media traveling through a system encounters very little turbulence, while enabling high flow rates with minimal pressure losses compared to conventional steel systems.

Secondly, Elevation incorporates the world's most highly accepted grooved fitting design. All mechanical contractors will understand the technology and will be able to install an Elevation system. We ensure that all fittings coming into contact with the media flowing through a system are manufactured from high quality aluminum so that system integrity will never be compromised. Zero contamination is a priority; it is the only solution to achieve the lowest cost of ownership when operating a piping system.

Elevation provides a simple solution for large air/gas/vacuum users and is, without a doubt, the easiest and fastest system to install. It has the lowest cost of ownership and the best quality of media delivery available.

Outstanding performance from an outstanding product is what we demand and what you should expect from our system.





# *Elevation Complete - now switch to Infinity to provide the total solution*

Once you have installed an Elevation header, it is common to have smaller diameter piping for drops and solid line hook ups to machines and equipment.

Infinity, like Elevation, promotes a total metal solution with bore sizes from 20mm (3/4") up to 63mm (2-1/2"). The piping is manufactured in the same marine grade aluminum as Elevation but promotes a different range and style of fittings.

Infinity fittings are made from solid brass and nickel-plated to provide a strong and non-corrosive solution. The fitting design is a simple "push to connect" system and requires minimal skill, effort or tooling to install.



Attach saddle clamp to Elevation pipe with female threaded connection



Screw male thread connector into female connector



Attach Infinity piping to fitting

#### It could not be easier

Simply drill a hole in the Elevation piping and fix an outlet saddle clamp around the tubing to leave a female threaded connection that allows for the simple conversion between Elevation and Infinity.



- Lightest product in the market
- Fastest installed system compared to all others available
- Structurally as strong as carbon steel
- One-tenth the weight of same diameter steel
- Tube and fittings manufactured from non-corrosive marine grade aluminum
- Guaranteed highest quality air delivery
- Material construction and design allows highest flow rates and lowest pressure drops
- System flexibility means simple modifications and/or additions
- Ten year leak free guarantee
- "Green" Elevation is manufactured from 100% recyclable materials



#### SMOOTH BORE HIGH-PERFORMANCE

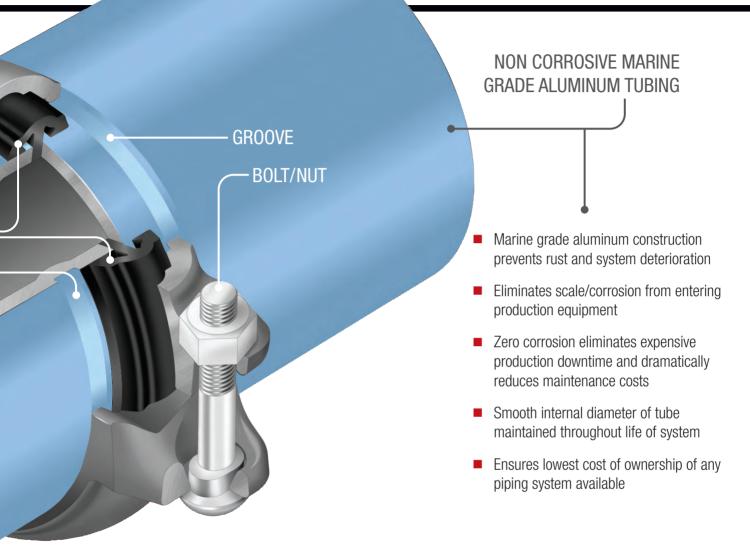


Phone: 704.947.6966 • Fax: 704.947.6965 www.appliedsystemtech.com HOUSING

GASKET =

GROOVE





#### Don't jeopardize air handling efficiency.

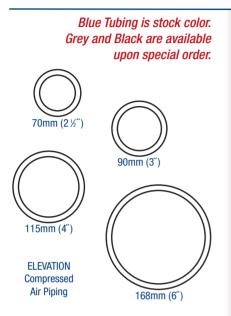


Compressed air piping is responsible for the delivery of compressed air to the point of use. Its material, age and condition impact both system reliability and air quality. Compressed air piping made from iron will rust and corrode, creating buildup on the interior and reducing the functional diameter. This buildup results in pressure drop within the system, contributing to high levels of contamination and poor air quality.





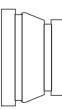
#### **Components**



Adapters are supplied without coupling



Adapter, Male



Adapter, Female

Reducer

Compressed Air Piping - Blue		Part Number
70mm - ELEVATION Tubing Blue-16ft	stock	10000-70-AIR-BLUE
90mm - ELEVATION Tubing Blue - 16ft	stock	10000-90 -AIR-BLUE
115mm - ELEVATION Tubing Blue - 16ft	stock	10000-115-AIR-BLUE
168mm - ELEVATION Tubing Blue-16ft	stock	10000-168-AIR-BLUE
Vacuum Piping - Grey		
70mm - ELEVATION Tubing Grey-16ft	non stock	10000-70-VAC-GREY
90mm - ELEVATION Tubing Grey-16ft	non stock	10000-90-VAC-GREY
115mm - ELEVATION Tubing Grey-16ft	non stock	10000-115-VAC-GREY
168mm - ELEVATION Tubing Grey-16ft	non stock	10000-168-VAC-GREY
Inert Gases Piping - Black		
70mm - ELEVATION Tubing Black-16ft	non stock	10000-70-GAS-BLACK
90mm - ELEVATION Tubing Black-16ft	non stock	10000-90-GAS-BLACK
115mm - ELEVATION Tubing Black-16ft	non stock	10000-115-GAS-BLACK
168mm - ELEVATION Tubing Black-16ft	non stock	10000-168-GAS-BLACK
Adapters		Part Number

Adapters			Part Number
Adapter, 70mm TUBE to 1 1/2"	NPT male	supplied without coupling	100011-70-24
Adapter, 70mm TUBE to 2"	NPT male	supplied without coupling	100011-70-32
Adapter, 70mm TUBE to 21/2"	NPT male	supplied without coupling	100011-70-40
Adapter, 70mm TUBE to 2 1/2"	NPT female	supplied without coupling	100011-70-40-F
Adapter, 90mm TUBE to 1 $^{1\!\!/}_{2}$	NPT male	supplied without coupling	100011-90-24
Adapter, 90mm TUBE to 2"	NPT male	supplied without coupling	100011-90-32
Adapter, 90mm TUBE to 2 1/2"	NPT male	supplied without coupling	100011-90-40
Adapter, 90mm TUBE to 3"	NPT male	supplied without coupling	100011-90-48
Adapter, 90mm TUBE to 3"	NPT female	supplied without coupling	100011-90-48-F
Adapter, 115mm TUBE to 2"	NPT male	supplied without coupling	100011-115-32
Adapter, 115mm TUBE to 2 1/2"	NPT male	supplied without coupling	100011-115-40
Adapter, 115mm TUBE to 3"	NPT male	supplied without coupling	100011-115-48
Adapter, 115mm TUBE to 4"	NPT male	supplied without coupling	100011-115-64
Adapter, 115mm TUBE to 4"	NPT female	supplied without coupling	100011-115-64-F
Reducer, 90mm TUBE to 70mm	TUBE	supplied without coupling	100014-90-70
Reducer, 115mm TUBE to 70mr	n TUBE	supplied without coupling	100014-115-70
Reducer, 115mm TUBE to 90mr	n TUBE	supplied without coupling	100014-115-90
Reducer, 168mm TUBE to 90mr	n TUBE	supplied without coupling	100014-96-48
Reducer, 168mm TUBE to 115m	nm TUBE	supplied without coupling	100014-96-64



Flanges Available ANSI Flanges			Part Number
In Additional	Flange, 90mm TUBE to ANSI 3" 150 Fla	nge	100012-48
Sizes On Request (Special Order)	Flange, 115mm TUBE to ANSI 4" 150 Flange Flange, 168mm TUBE to ANSI 6" 150 Flange		100012-64
ANSI Flange			100012-96
Kits Include	ANSI Flange Adapter Kits		Part Number
Flange, Reducer	90mm TUBE to 6", ANSI 150 Flange	Includes flange, reducer & coupling	100235-90-96
and Coupling	90mm TUBE to 4", ANSI 150 Flange	Includes flange, reducer & coupling	100235-90-64
Additional Flange Sizes	90mm TUBE to 2 ½", ANSI 150 Flange	Includes flange, reducer & coupling	100235-90-40
Available On Request	90mm TUBE to 2", ANSI 150 Flange	Includes flange, reducer & coupling	100235-90-32
(Special Order)	115mm TUBE to 6", ANSI 150 Flange	Includes flange, reducer & coupling	100235-115-96
	115mm TUBE to 3", ANSI 150 Flange	Includes flange, reducer & coupling	100235-115-48
	115mm TUBE to $2\frac{1}{2}$ ", ANSI 150 Flange	Includes flange, reducer & coupling	100235-115-40
	115mm TUBE to 2", ANSI 150 Flange	Includes flange, reducer & coupling	100235-115-32
	Straight Union Couplings		Part Number
	Straight Union Coupling 70mm	Rigid	100040-70-R
	Straight Union Coupling 70mm	Flexible Aluminum	100040-70-F
	Straight Union Coupling 90mm	Rigid	100040-90-R
	Straight Union Coupling 90mm	Flexible Aluminum	100040-90-F
	Straight Union Coupling 115mm	Rigid	100040-115-R
Straight Union	Straight Union Coupling 115mm	Flexible Aluminum	100040-115-F
Coupling	Straight Union Coupling 168mm	Rigid	100040-168R
	Straight Union Coupling 168mm	Flexible Aluminum	100040-168F
Includes Two	90° Union Elbows with Couplings		Part Number
Couplings	Union Elbow 70mm	includes two couplings	100130-70
	Union Elbow 90mm	includes two couplings	100130-90
90° Union Elbow	Union Elbow 115mm	includes two couplings	100130-115
	Union Elbow 168mm	includes two couplings	100130-168
Includes Two	45° Union Elbows with Couplings		Part Number
Couplings	Union Elbow 45 deg. 70mm	includes two couplings	100140-70
	Union Elbow 45 deg. 90mm	includes two couplings	100140-90
45° Union Elbow	Union Elbow 45 deg. 115mm	includes two couplings	100140-115
	Union Elbow 45 deg. 168mm	includes two couplings	100140-168





#### **Components**

	Equal Tee with Couplings			Part Number
Three	Junction Tee 70mm ind	cludes three couplin	ngs	100230-70
Ial Tee Couplings	Junction Tee 90mm ind	cludes three couplir	lgs	100230-90
	Junction Tee 115mm ind	cludes three couplir	lgs	100230-115
	Junction Tee 168mm ind	cludes three couplir	ngs	100230-168
	Outlet, Saddle Clamp			Part Number
Outlet,	Saddle Clamp Outlet, 70mm X1/2"	NPT female	without coupling	100234-70-08
Saddle Clamp	Saddle Clamp Outlet, 70mm X <sup>3</sup> / <sub>4</sub> "	NPT female	without coupling	100234-70-12
	Saddle Clamp Outlet, 70mm X 1"	NPT female	without coupling	100234-70-16
))	Saddle Clamp Outlet, 70mm X 1 1/2"	NPT female	without coupling	100234-70-24
	Saddle Clamp Outlet, 90mm X <sup>3</sup> / <sub>4</sub> "	NPT female	without coupling	100234-90-12
JP (	Saddle Clamp Outlet, 90mm X 1"	NPT female	without coupling	100234-90-16
	Saddle Clamp Outlet, 90mm X 1 1/2"	NPT female	without coupling	100234-90-24
	Saddle Clamp Outlet, 90mm X 2"	NPT female	without coupling	100234-90-32
	Saddle Clamp Outlet, 115mm X <sup>3</sup> /4"	NPT female	without coupling	100234-115-12
	Saddle Clamp Outlet, 115mm X 1"	NPT female	without coupling	100234-115-16
	Saddle Clamp Outlet, 115mm X 1 1/2"	NPT female	without coupling	100234-115-24
	Saddle Clamp Outlet, 115mm X 2"	NPT female	without coupling	100234-115-32
	Saddle Clamp Outlet, 168mm X 1 1/2"	NPT female	without coupling	100234-168-24
	Saddle Clamp Outlet, 168mm X 2"	NPT female	without coupling	100234-168-32
	Saddle Clamp Outlet, 168mm X 115mm	Grooved	without coupling	100234-168-115
	Saddle Clamp Outlet, 168mm X 90mm	Grooved	without coupling	100234-168-90
Supplied	Plug - Cap End Fitting			Part Number
Without Coupling	Plug Cap 70mm Ductile Galv	I. witho	ut coupling	100610-70-D
	Plug Cap 90mm Aluminum		ut coupling	100610-90-A
)	Plug Cap 90mm Ductile Galv		ut coupling	100610-90-D
/	Plug Cap 115mm Aluminum		ut coupling	100610-115-A
Plug-	Plug Cap 115mm Ductile Galv		ut coupling	100610-115-D
Cap End Fitting	Plug Cap 168mm Ductile Galv		ut coupling	100610-168-D
Butterfly Valve	Butterfly Valve - Tube to Tub	e with Cour	linas	Part Number
Includes Two	TEN POSITION - Butterfly valve, 70mm TUE		les two couplings	100700-70
Couplings	TEN POSITION - Butterfly valve, 90mm TUE		les two couplings	100700-90
Butterfly Valve -	TEN POSITION - Butterfly valve, 30mm Tel		les two couplings	100700-30
Tube to Tube with Couplings	TEN POSITION - Butterfly valve, 168mm TU		les two couplings	100700-168



	Hanging Brackets	Part Number	
	Pipe Hanger (¾" female insert) 70mm - Steel	100820-70	
	Pipe Hanger (¾" female insert) 90mm - Steel	100820-90	
	Pipe Hanger (%" female insert) 115mm - Steel	100820-115	
Hanging Bracket	Pipe Hanger (½" female insert) 168mm - Steel <i>includes washer adapter</i> to fit 3/8" hanger	100820-168	
	Bracket, hanging/wall (¾" female) 90mm - Nylon	100810-90	
	Bracket, hanging/wall (¾" female) 115mm - Nylon	100810-115	
When ordering wire hanger for 168mm	Hanging Wire System	Part Number	
pipe hanger, an adapter will be supplied.	Wire Hanger 15ft lengths x pk of 10 (%" Thread) wire cutters included	100830-15	
Wall Bracket Kits Include Bracket, Strap and Bolts	Wall Bracket Kit	Part Number	
	Wall Bracket with Pipe Strap & Bolts 70mm	100835-70	
	Wall Bracket with Pipe Strap & Bolts 90mm	100835-90	
Wall Bracket Kit	Wall Bracket with Pipe Strap & Bolts 115mm	100835-115	
	Replacement Seals		
	Replacement Seal, 70mm Standard	100921-70-T	
	Replacement Seal, 90mm Standard		
Replacement Seal, 115mm Standard Replacement Seal, 168mm Standard		100921-115-T	
		100921-168-T	
	Couplings with high temperature seals are available upon request. Please contact the AST sales office for more information		
	Tools		
Manual Grooving Tool	Manual Grooving Tool	100950-M	
	Manual Grooving Tool Rental (Weekly rental, Call)	100950-M-R	
	Groove Inspection Gauge	100952-G	



**Specifications** 

#### **Elevation Technical Specifications:**

Max Working Pressure	220 PSI (15 BAR)		
Max Working Temperature	-4°F to 176° F (100% Duty)		
Tubing Material	Aluminum, ASTM 6063-T5 (Marine Grade)		
Tubing Weight	70 mm - 0.86 lbs./ft 90 mm - 1.04 lbs./ft 115 mm - 1.15 lbs./ft 168 mm - 3.12 lbs./ft		
Standard Seals	(-4° F to 176° F) Nitrile Rubber		
High Temperature Seals	(-4° F to 300° F) Fluoroelastomer		
Fittings	Aluminum, B-26, 356-T6		
Couplings	Ductile Iron, Galvanized, grade 65-45-12		
Standards & Approvals	ASME B31.1 Power Piping ASTM F-1476 BOCA CSA B-242 SBCCI		

Elevation System Flow Rates:					
	Cu Ft/min				
	70 mm	90 mm	115 mm	168 mm	
100 PSI	948	1955	3844	10078	
125 PSI	1064	2162	4205	11194	
150 PSI	1169	2364	4591	12153	
220 PSI	1417	2937	5568	14740	

Above flow rates are based on straight line flow allowing for a 1psi pressure drop per/100ft over pipe and couplings. For loop systems, flow rates are doubled, i.e. 90mm tubing at 100 psi flows 3910 cfm



By-passes are a snap with our integrated fitting design



Seamless integration between Elevation and Infinity



Easy transitions from any existing piping system



Transform your compressor room into a show piece



Complex piping scenarios become clean and efficient



Well suited for indoor or outdoor applications





# AT applied system technologies<sup>™</sup>

#### **10 Year Guarantee**

Applied System Technologies warrants its pipe and fitting components to be free of leaks due to manufacturing defects for a period of 10 years from date of sale. This Express warranty is in lieu of and excludes all other warranties, guarantees or representations, express or implied, by operation of law or otherwise, including any warranty that the materials are suitable for the buyer's requirements or special use. System must be installed by an AST approved technician.

**Applied System Technologies** agrees to replace any component proven to have a manufacturing defect.

**Applied System Technologies** shall not be liable for any consequential damages nor for loss, damage or expenses directly or indirectly arising from the use of the product.



Applied System Technologies 9800 West Kincey Avenue Suite 135 Huntersville, NC 28078

Phone: 704.947.6966 Fax: 704.947.6965



#### www.appliedsystemtech.com

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