

The Intelligent Soil & Ventilation stack Piping System



ZERO MAINTENANCE
LOWER NOISE
MIXED SOIL & VENT
QUICK DRAIN
ECONOMICAL

ATLANTA SOVENT HDPE

SOIL & VENTILATION STACK PIPING SYSTEM



ATLANTA INDUSTRIES, INC.



005

TABLE OF CONTENTS

2	Background
3	Applications / Advantages
4	Lower Noise
5	Sovent-system VS Conventional
6	Sovent aerator fitting
7	Sovent pipe specification
8	electroweld coupler
	45° elbow
	90° elbow
	expansion joint w/ cap
9	ring seal adapdet w/ cap
	eccentric reducer
	90° long elbow
10	45° wye equal
	45° wye reducer
	tee reducer
11	stub end
	ventilation branch
	88.5° tee
12	butt fusion welding machine
	electroweld machine
	vertical pipe clip
	horizontal pipe clip
13	Sovent HDPE butt fusion jointing method



ATLANTA Industries, Inc

Atlanta Industries, Inc. traces its humble beginnings in Magdalena St., Binondo, Manila as a hardware store selling GI and PVC pipes consisting of five employees.

Established as Atlantic Commodities in 1973, Atlanta became a construction supplies wholesaler in Caloocan City with five (5) employees. In 1976, it was renamed to Atlantic Industrial Sales Corp., a wholesaler and direct seller to the industrial sector.

After two years, it acquired Parisian Vinyl Corporation which was later changed into Atlanta Vinyl Corporation, a PVC pipe manufacturing company located in Pasig City. Since then, its progress has become unprecedented. In 1986, it was renamed to Atlanta Industries, Inc. to signify the growing diversification of products.

Atlanta's manufacturing facilities span more than 60,000 sq. m. with modern processing and quality-testing machineries. A manpower complement of 600 highly-skilled technicians and experienced engineers go on daily round-the-clock shifts to ensure that they meet production deadlines on time. With great pride and honor, Atlanta Industries, Inc. (Phils.) has won the coveted "MOST OUTSTANDING MANUFACTURER OF PVC PIPES & FITTINGS" award bestowed by the Consumers' Union of the Philippines for two consecutive years: 1989 & 1990.

The new Atlanta Industries (Guangzhou) Ltd. factory has an initial annual production output of 6,000 metric tons of high quality PVC pipes and 1,500 metric tons of high grade PE pipes.

Atlanta Industries (Guangzhou) Ltd. produces Polyethylene (PE) pipes for water service, telecommunications system and gas piping system.

Atlanta pipes & fittings are made of choiced prime grade raw materials and manufactured under a strict quality control procedure using the latest and most advanced extrusion and injection equipment. Atlanta pipes meet international standards and conform to ISO, JIS, BS, PNS and ASTM specifications.

Advantages include: lightweightness, high chemical resistance, low flow resistance, leakproof joints, easy installation and cost effectiveness. These proven qualities make Atlanta pipes and fittings superior to other kinds of conventional piping material and the top choice in the mining, chemical process, sanitation, irrigation, household and other industrial piping applications.

With an outstanding track record, Atlanta Industries, Inc. has established itself as one of the Philippine's leading manufacturers of high-grade industrial pipes and fittings. It continues to develop and produce new, modern and innovative building construction materials through the latest and most advanced processing technology for both uPVC and HDPE pipes.

Presently, Atlanta is producing 1,500 metric tons PVC and PE pipe-based products monthly or 18,000 metric tons per year.

Application

Atlanta SOVENT HDPE is highly suitable for all types of drainage including above ground, below ground and chemical waste. Can be use for residential or industrial construction, for laboratories, conventionally installed or prefabricated, embedded in concrete or underground.



Advantages

Economical

Atlanta SOVENT HDPE pipe weighs considerably less than pipes made from conventional materials. Typically, it is only 1/4 to 1/10 the weight of cast iron, steel or concrete pipe used for same service. This affords significant savings in transportation and installation by reducing manpower and equipment need to a minimum.

Zero Maintenance

Atlanta SOVENT HDPE piping has replaced steel, stainless steel, cast iron and concrete piping where chemical or corrosion resistance is required. It is resistant to attack by acids, bases, salt and many hydrocarbon materials. In addition, even the most aggressive soil will not corrode the pipe.

Mixed Soil & Vent

Certification Body
Certificate No. 002
Certificate PHQM01/0049

Atlanta SOVENT HDPE is fully integrated into a single drainage system. It is flexible and operationally reliable drainage system, even in soils in which a certain degree of settling of ground must be anticipated. The versatility of the system makes it suitable for soil and waste stacks, vent pipes, connection and branch pipes, collector pipes, ground pipes, and domestic drainage pipes.

Quick Drain

Atlanta SOVENT HDPE has smooth inside pipe surface allows for a high Hazen-Williams "c" factor. "c" remains constant throughout the lifetime of the system due to an innate high resistance to scale and biological build up. Polyethylene (PE) is also biologically inert. Excellent water hammer characteristics to withstand surges: The inherent properties of polyethylene allow the system to significantly lower the effect of surges compared to PVC and ductile iron systems.

Lower Noise

Noise from DWV pipes in wall cavities adjacent to living rooms, dining rooms and bedrooms can be annoying when waste water is discharged into the drain pipe from upper floors. In the past, the only sensible option to reduce sound was to use cast iron in place of PVC plastic pipe.

Atlanta HDPE Sovent Pipe

Base Meter Setting	70 db
Meter Reading	+3 db
Sound Level	<u>67 db</u>

Registered the Lowest noise level

Cast Iron Pipe

Base Meter Setting	70 db
Meter Reading	+2 db
Sound Level	72 db

3.2 Times greater noise than Atlanta HDPE Sovent

PVC Pipe

Base Meter Setting	70 db
Meter Reading	+6 db
Sound Level	76 db

8 Times greater noise than Atlanta HDPE Sovent



The innovative soil and waste drainage system

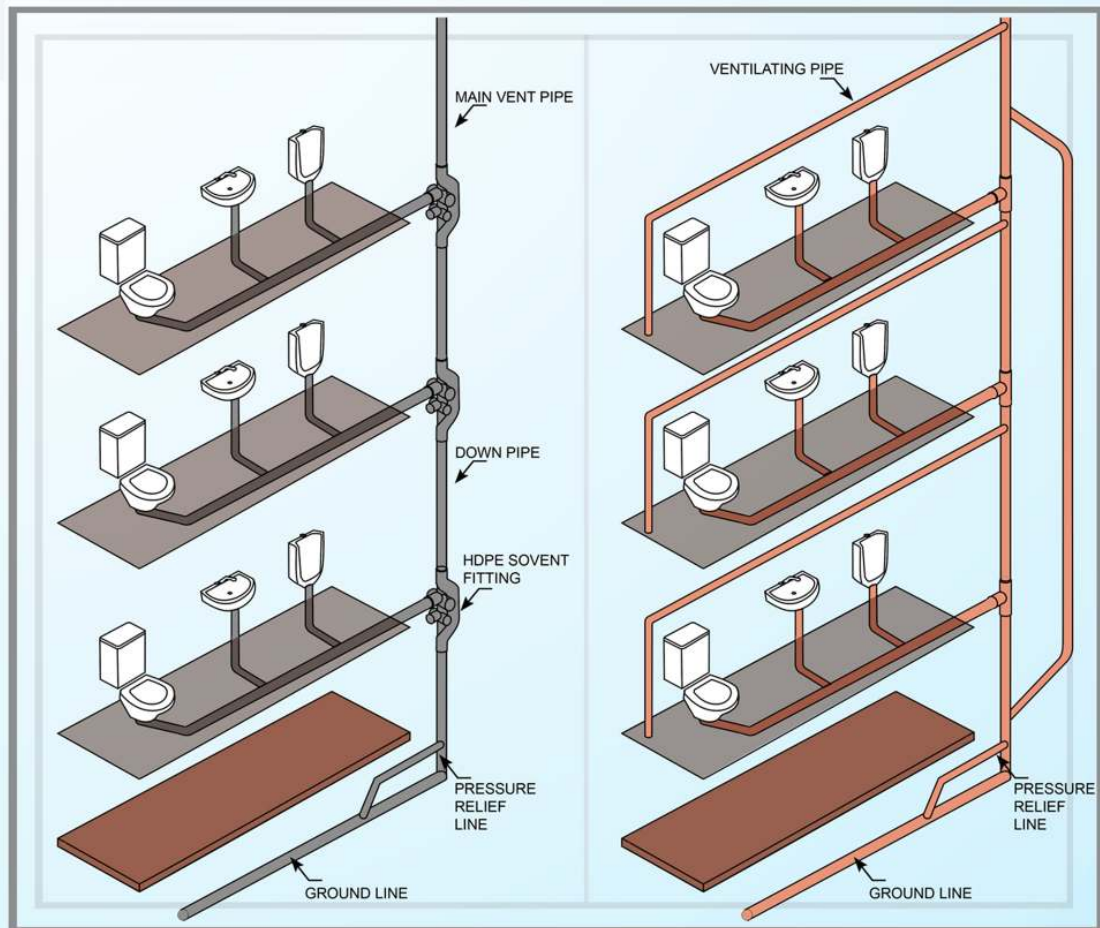
Field of application:

Atlanta Sovent increases the performance of a soil and waste drainage system.

So it is suitable for

- high rise buildings
- hotels
- laboratories
- industrial plants.

The fitting is characterized by the most common stack size of 110 mm (4") in diameter, and could reach a capacity of up to over 70 apartments per stack.



Sovent-system

With the Atlanta Sovent fitting, the vent pipe can be easily managed by using only one fitting on each floor level. Which means there is no additional ventilation pipe necessary.

Conventional ventilated system

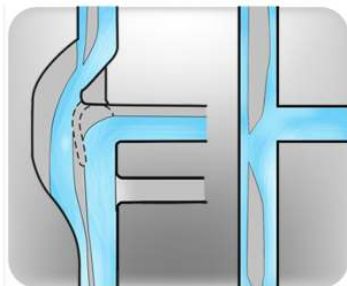
Each sanitary fitting has an additional vent pipe connected which will have more installation time, more material cost and larger pipe ducts.



Sovent aerator fitting



Hydraulic test tower



Comparison of the flow characteristics

Rules of application

Stack o. d / i. d \varnothing [mm]	Max. permitted numbers		Max. expected simultaneous flow rate Qs [l/s]	
	Design units (DU) per stack	WC		
		per stack	per storey	
110/100	300	approx.70	8	8.7

The Sovent aerator fittings have proven their performance in high-rise buildings up to 50 floors all over the world.

The aerator fitting is designed to:

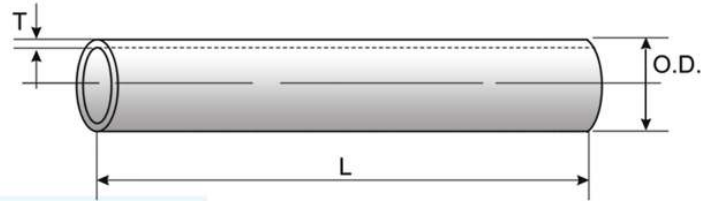
- Better lateral water-flow in the branch which prevents the accumulation plug of water in the stack.
- It effectively & efficiently mix the waste flowing in the branches with the water/air-flow in the stack.
- assures the ventilation to every branch pipes
- Controls the speed of flow in both air and liquid in the stack.
- Prevents the penetration of any water or debris into the branches.
- Multiple and flexible jointing possibilities in one fitting.

Performance of the Sovent aerator fitting

With the formation of a hydraulic plug in the stack by the inflowing water from a branch, conventional stacks can be easily overloaded with negative pressures, exceeding the tolerable limits and traps losing the water seal.

Atlanta SOVENT HDPE Piping System

The innovative soil and waste drainage system



NOMINAL SIZE	OUTSIDE DIAMETER	INSIDE DIAMETER	STANDARD LENGTH	THICKNESS
(IN)	(MM)	(MM)		
2	63	57	5000	3
2 1/2	75	69	5000	3
3	90	83	5000	3.5
4	110	101.4	5000	4.3
6	160	147.6	5000	6.2
8	200	187.6	5000	6.2
10	280	233	5000	9
12	315	296	5000	11

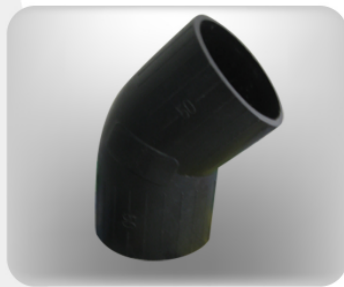
Physical Properties of Atlanta SOVENT HDPE Piping System

PROPERTY	ASTM TEST	VALUE
Density, GMS/CC Melt Flow (Condition F), MS/10 Min. Environmental Stress Cracking Resistance, (Hrs.) Condition A, B & C	D 1505 D 1238 D 1693	0.955 1.5 >1500 No Failures
Tensile Strength, Yield, PSI 20 In./Min. 2 In./Min.	D 638 Die IV	4800 3200
Elongation, % 2 In./Min.		>600
Impact Strength, Ft. Lbs./In. Notch, Specimen Thickness 0.250 Inch 0.125 Inch	D 256	7 12
Vicat Softening Temperature, °F Brittleness Temperature, °F Thermal Conductivity, BTU, In./FT./Hrs. °F Flexural Modulus, PSI Modulus of Elasticity, PSI Hardness, Shore D Coefficient of Linear Thermal Expansion In./In./°F	D 1525 D 746 C 177 D 790 D 638 D 2240 D 696	257 180 3.7 140M 100M 65 1.2 X 10



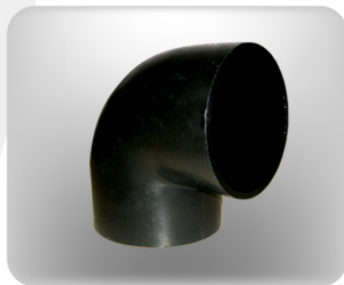
Electroweld Coupler

Size	Code
dn63	HSECC
dn75	HSECE
dn90	HSECG
dn110	HSECH
dn160	HSE CJ
dn200	HSECL
dn250	HSECN
dn315	HSECP



45° Elbow

Size	Code
dn63	HSE4C
dn75	HSE4E
dn90	HSE4G
dn110	HSE4H
dn160	HSE4J
dn200	HSE4L
dn250	HSE4N
dn315	HSE4N



90° Elbow

Size	Code
dn63	HSE9C
dn75	HSE9E
dn90	HSE9G
dn110	HSE9H
dn160	HSE9J
dn200	HSE9L
dn250	HSE9N
dn315	HSE9P



Expansion Joint w/ Cap

Size	Code
dn90	HSEJCG
dn110	HSEJCH
dn160	HSEJCJ
dn200	HSEJCL
dn250	HSEJCN
dn315	HSEJCP



Ring Seal Adapter w/ Cap

Size	Code
dn90	HSRSAG
dn110	HSRSAH
dn160	HSRSAJ
dn200	HSRSAL
dn250	HSRSAN
dn315	HSRSAP



Eccentric Reducer

Size	Code
dn75/63	HSEREC
dn90/63	HSERGC
dn90/75	HSERGE
dn110/63	HSERHC
dn110/75	HSERHE
dn110/90	HSERHG
dn160/110	HSERJH
dn200/110	HSERLH
dn200/160	HSERLJ
dn250/200	HSERNL
dn315/200	HSERPC
dn315/250	HSERPN



90° Long Elbow

Size	Code
dn63	HSLE9C
dn75	HSLE9E
dn90	HSLE9G
dn110	HSLE9H
dn160	HSLE9J
dn200	HSLE9L
dn250	HSEE9N
dn315	HSLE9P



45° Wye Equal

Size	Code
dn63	
dn75	
dn90	
dn110	
dn160	
dn200	
dn250	
dn315	



45° Wye Reducer

Size	Code
dn90/75	
dn110/63	
dn110/75	
dn110/90	
dn160/110	
dn200/110	
dn200/160	
dn250/110	
dn250/160	
dn250/200	
dn315/110	
dn315/160	
dn315/200	
dn315/250	



Tee Reducer

Size	Code
dn90/75	
dn110/63	
dn110/75	
dn110/90	
dn160/110	
dn200/110	
dn200/160	
dn250/110	
dn250/160	
dn250/200	
dn315/110	
dn315/160	
dn315/200	
dn315/250	



Stub End

Size	Code
dn110	HSSEH
dn160	HSSEJ
dn200	HSSEL



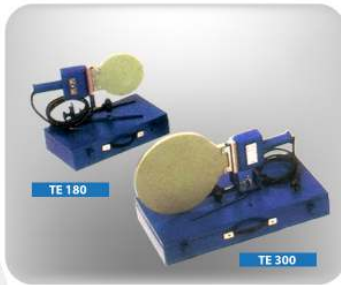
Ventilation Branch

Size	Code
dn110	HSVBH
dn160	HSVBJ



88.5° Tee

Size	Code
dn63	HST8C
dn75	HST8E
dn90	HST8G
dn110	HST8H
dn160/110	HST8JH



Butt Fusion Welding Machine

Portable butt welding PTFE coated heating mirrors for PE and PP pipes and fittings, supplied with adjustable temperature and support. On request each mirror can be supplied with metal transport box.

Model TE 180 Dia. 180mm - Watt 800 - Kg. 3,9
 Model TE 300 Dia. 300mm - Watt 1500 - Kg. 4,8



Electroweld Machine

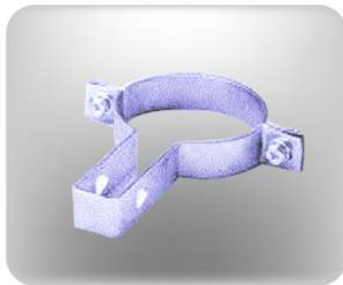
Fully automatic electrofusion welders with manual and barcode welding parameters input available.

ONDINE COMPACT(220V): Barcode Polymode Compact
 220V AC, 8~48 V output voltage.



Vertical Pipe Clip

Size	Code
dn63	HSVPCC
dn75	HSVPCE
dn90	HSVPCG
dn110	HSVPCH
dn160	HSVPCJ
dn200	HSVPCL
dn250	HSVPCN
dn315	HSPVCP



Horizontal Pipe Clip

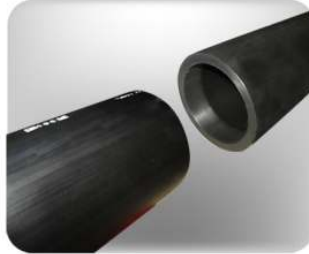
Size	Code
dn63	HSHPCC
dn75	HSHPCE
dn90	HSHPCG
dn110	HSHPCH
dn125	HSHPCJ
dn160	HSHPCL
dn200	HSHPCN

Atlanta SOVENT HDPE Butt Fusion Jointing Method

Preparation



Cut the pipe square. Use pipe cutter to ensure pipe ends are cut properly.



Dry, clean and scrape welding ends. Remove burrs while welding ends must remain dry the whole welding process.



Clean pipe ends.

Actual Jointing



Insert pipe or fitting ends into the sleeve coupling.



Connect electrofusion machine, start welding procedure. Welding time, 70-90 sec.



After the "END" indicator has turned on, removed the connection cable. The protruding yellow indicator indicates whether the welding process was performed correctly.



After the "END" indicator has turned on, removed the connection cable. The protruding yellow indicator indicates whether the welding process was performed correctly.

Check visually the welding joint



Correct



Out of axial alignment



Too high pressure at the start of the welding procedure



Uneven welding heat



ATLANTA INDUSTRIES, INC.

*35th Floor Atlanta Centre No. 31 Annapolis St.,
Greenhills, San Juan City
Tel nos.: 723-0781 to 96 | 744-4700
Fax nos.: 722-8705 | 744-4703
Email: atlanta@atlanta.ph*