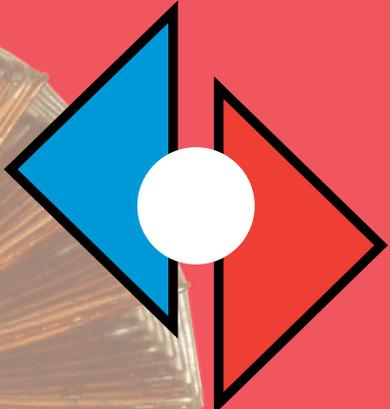


**SPIROVENT®**

JUNIOR SERIES

**JUNIOR SERIES  
MICROBUBBLE™  
SEPARATORS AND  
DIRT SEPARATORS**



# Air in system water causes many problems.

Noisy pipes, valves, and other air-related noises are often accepted as the signs of a functioning system. Excessive pump noise, cavitation, and cascading in terminal units are considered normal.

But... air in system water can cause corrosion, reduced efficiency, poorly heated or inadequately cooled rooms, accelerated component wear and on-going complaints.

There is a device that will keep your system free of air ... permanently. Less maintenance, quiet operation, fewer costs!

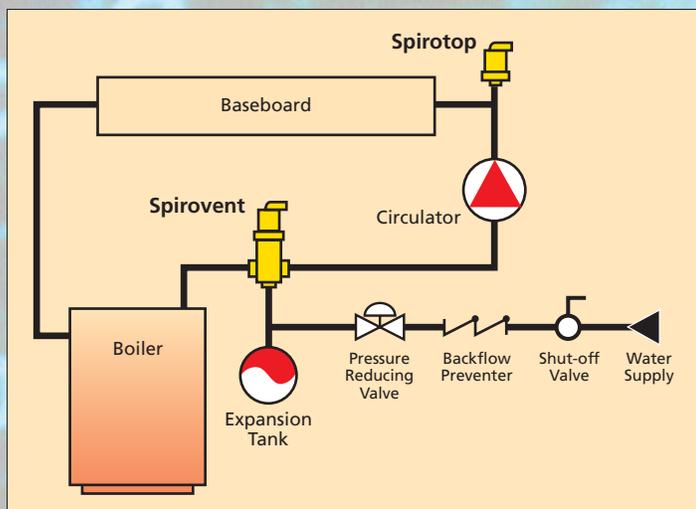
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## SPIROVENT

Unlike conventional air eliminators or air scoops, the Spirovent completely eliminates 100% of the free air, 100% of the entrained air, and up to 99.6% of the dissolved air in the system. Consisting of woven copper wire soldered to a copper tube, the patented Spirotube® creates a low velocity area in the Spirovent that scrubs the bubbles from the water. The air bubbles rise and collect in the air chamber before they are vented from the system via an integral automatic valve. Air problems become a thing of the past.

### Install the Spirovent for optimum performance

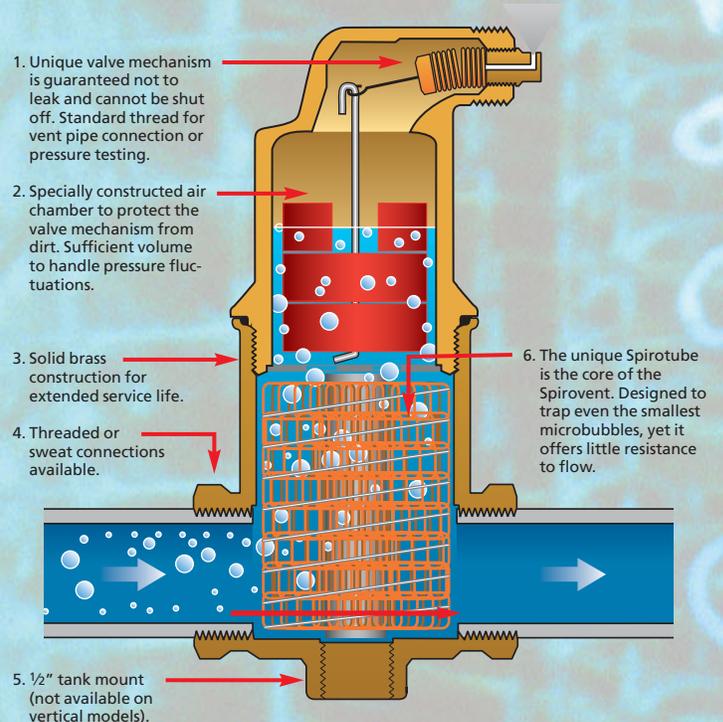
Ideal placement of the Spirovent Junior is based on microbubble separation and Henry's Law. Simply put, Henry's Law states that air is released from water as the temperature increases or the pressure decreases. In hydronic heating systems, the Spirovent should be installed in the boiler supply line where the temperature is highest. Should the circulator be located on the supply line as well, the Spirovent should be installed between the boiler and the circulator where pressure is also the lowest.



## ADVANTAGES TO THE INSTALLER AND END-USER

- Maintenance free.
- No venting required.
- Vent head is designed to stay dry. Dirt and leak resistant.
- 1/2" male thread port for pressure testing or remote venting of unwanted gases.
- Quiet operation.
- Increased component life.
- Reduced oxygen-based corrosion and pump cavitation.

### The principal difference



The Spirotube is the core of the Spirovent. It allows the Spirovent to scrub out 100% of the free air, 100% of the entrained air, and up to 99.6% of the dissolved air in the system. Even the smallest microbubbles coalesce and rise. Air is eliminated, component life and heat transfer abilities are increased; oxygen-based corrosion and pump cavitation are reduced; and annoying gurgling, cascading, and other air-related system noises are eliminated.

# Clean system water throughout the life of the installation.

The life and efficiency of a heating or cooling system is greatly dependent on clean system water. Dirt in the system can cause increased component wear and frequent breakdowns. Corrosion, pump and control valve wear, and reduced efficiency result in increased maintenance, unnecessary costs and dissatisfied owners. Strainers and filters do the job, but if not cleaned on a regular basis, they cause low flow rates and, eventually, blockages.

There is a solution!

A system without dirt is possible. There is a unique device that will remove dirt down to the smallest particle. It works continuously and results in less maintenance, fewer costs and satisfied owners!

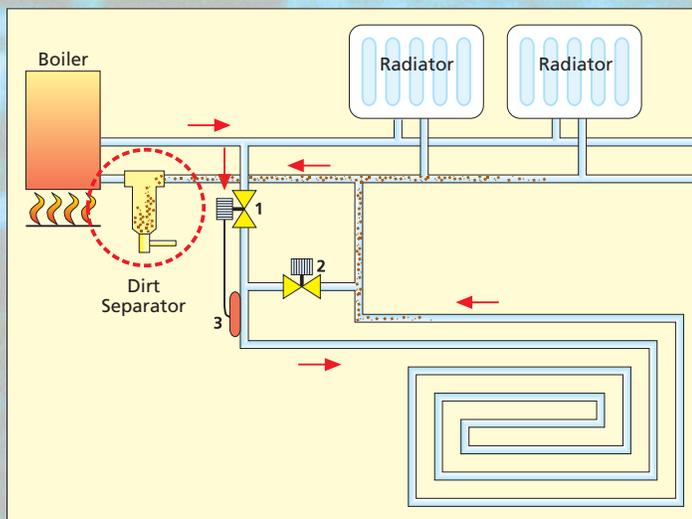
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## SPIROTRAP

The Spirotrap's construction is similar to the Spirovent. The patented Spirotube, core of the Spirovent, is also the core of the Spirotrap. In the Spirotrap, the Spirotube creates a low velocity area that forces dirt particles to sink to the dirt collection chamber at the bottom of the unit. Because the dirt is collected outside of the main flow, blockages do not occur, and the Spirotrap's pressure drop remains constant.

### The benefits are clear!

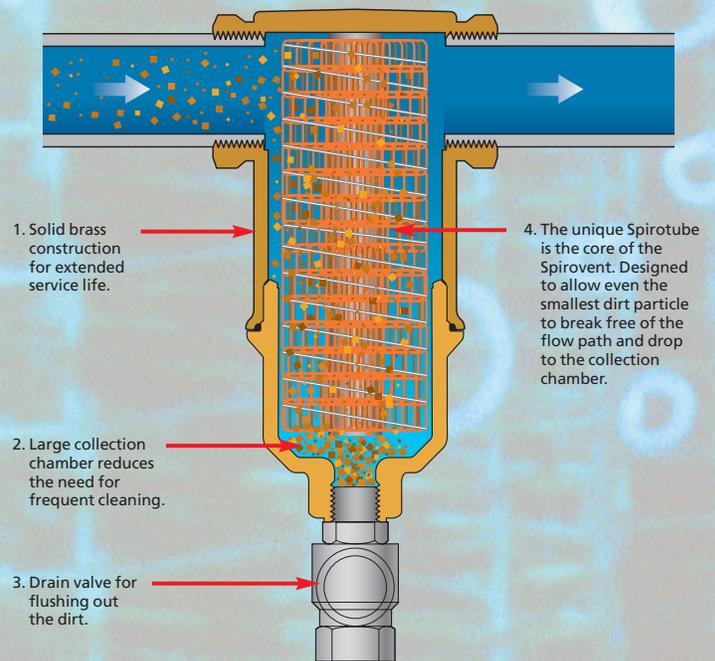
The Spirotrap is so much more than your traditional separator! The unique construction of the Spirotrap dirt separator allows for quick and simple dirt removal while the system remains fully operational, whereas traditional products need to be taken apart for cleaning. There are no strainers, filters or replacement parts to get clogged! Flow remains constant without the high pressure drop. Clearly beneficial, clearly Spirotrap!



## ADVANTAGES TO THE INSTALLER AND END-USER

- Virtually no maintenance.
- No replacement filters to get clogged.
- Dirt can be flushed while system is fully operational.
- No bypass or isolating valves required.
- Will not block the flow.
- Minimum pressure drop; always constant.

### The principal difference



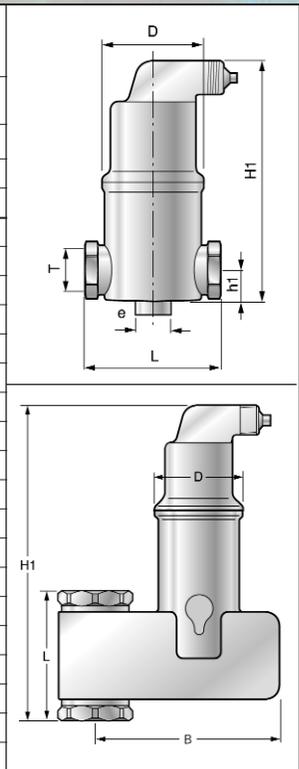
Spirotrap's unique construction allows for the removal of small dirt particles with a specific weight heavier than water. The patented Spirotube, the core of the Spirotrap, creates a low velocity area that forces dirt particles to sink to the dirt collection chamber at the bottom of the unit. The Spirotrap works continuously and is not affected by the trapped dirt. Blockages are impossible because the dirt is collected at the bottom of the unit.

## Technical Specification — Spirovent Junior Air Eliminator

SPIROVENT		JUNIOR				
Threaded Part Number		VJR075TM	VJR100TM	VJR125TM	VJR150TM	VJR200TM
Sweat Part Number		VJS075TM	VJS100TM	VJS125TM	N/A	N/A
Vertical Part Number		VJV075FT	VJV100FT	VJV125FT	N/A	N/A
Pipe Size		¾"	1"	1¼"	1½"	2"
Thread	NPT	¾"	1"	1¼"	1½"	2"
D	Inch	2.6	2.6	2.6	2.6	4.0
H1 (Threaded)	Inch	6.0	7.0	7.8	9.1	10.8
H1 (Sweat)	Inch	6.0	7.0	7.8	N/A	N/A
H1 (Vertical)	Inch	6.0	7.0	9.1	N/A	N/A
h1 (Threaded)	Inch	0.8	1.4	1.5	1.6	2.3
h1 (Sweat)	Inch	0.8	1.4	1.5	N/A	N/A
B (Vertical)	Inch	4.8	4.8	5.4	N/A	N/A
L (Threaded)	Inch	3.4	3.5	3.5	3.5	5.2
L (Sweat)	Inch	4.1	4.5	4.5	N/A	N/A
L (Vertical)	Inch	3.4	3.5	3.8	N/A	N/A
Plug (e)*		½"	½"	½"	½"	½"
Wt. Threaded	Lbs.	3.0	3.5	4	4.5	8.5
Wt. Sweat	Lbs.	3.0	3.0	3.5	N/A	N/A
Wt. Vertical	Lbs.	4.8	5.0	6.0	N/A	N/A
Recom. Flow**	GPM	6	10	15	30	40

\* Not Available on Vertical units.

\*\*Approximately 4 ft. per second inlet velocity

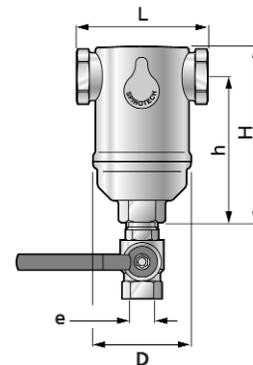


Consult Senior Air Brochure for larger Senior units.

## Technical Specification — Spirovent Dirt Separator

SPIROTRAP		JUNIOR			
Part Number		TDN075FT	TDN100FT	TDN125FT	TDN150FT
Pipe Size		¾"	1"	1¼"	1½"
Thread	NPT	¾"	1"	1¼"	1½"
D	Inch	2.6	2.6	2.6	2.6
H	Inch	4.6	5.6	6.3	7.9
h	Inch	3.8	4.3	4.8	6.3
L	Inch	3.3	3.5	3.5	3.5
Valve (e)		½"	½"	½"	½"
Wt.	Lbs.	2.5	3.0	3.5	4.0
Recom. Flow*	GPM	6	10	15	30

\*Approximately 4 ft. per second inlet velocity



Consult Senior Trap Brochure for larger Senior units.

Note: All Spirovent Junior models are of brass construction designed for a maximum working pressure of 150 psig and temperatures of 270°.

**SPIRO THERM**  
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