

SpiralAir™

High-Flow Air Atomizing

DESIGN FEATURES

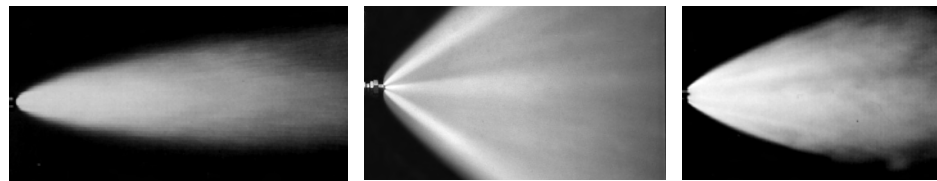
- A two-fluid nozzle using any gas as the atomizing fluid
- Three-stage atomization for highest performance
- Designed for high reliability in extremely hostile environments
- Efficient design reduces compressed air consumption
- U.S. Patent #5,240,183

SPRAY CHARACTERISTICS

- Spray patterns:** Full Cone and Flat Fan
Spray angles: 20°, 60°, 90°
 (Other angles available by special order)
Flow rates: 0.33 to 26 gpm



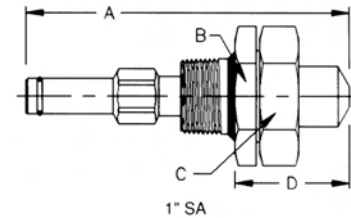
1 1/2" SA (Set-up #) - A - 00



Narrow Round 20°

Wide Round 90°

Flat Fan 60°

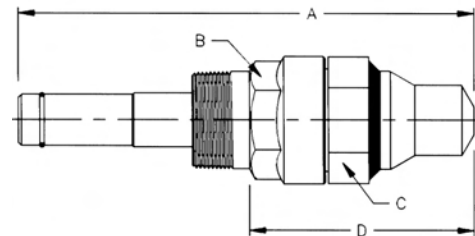


1 SA (Set-up #) - A - 00

Dimensions are approximate. Check with BETE for critical dimension applications.

SpiralAir Spray Set-up, Spiral Tip and Dimensions

Pipe Size	Spray Set-up No.	Spiral Tip No.	Spray Angle	Spray Type	Approx. Free Pass. Dia. (in.)	Dimensions (in.)				Wt. (lbs)	
						Pipe Size	A	B	C		D
1"	SA 101	14	20°	Narrow Round	0.19	1	5.83	2.00	2.00	2.00	1.4
	SA 308 SA 310		90°	Wide Round	0.106						
	SA 402 SA 404	60°	Round	0.106							
		90°	Flat Fan	0.166							
	SA 103	20	20°	Narrow Round	0.281						
			90°	Wide Round	0.137						
	SA 307 SA 309	60°	Round	0.137							
		SA 401 SA 403	90°	Flat Fan	0.205						
SA 2001	24		20°	Narrow Round	0.365	1 1/2	9.00	2.00	2.19	4.45	3.3
		90°	Wide Round	0.213							
SA 2008 SA 2012	60°	Round	0.213								
SA 2100	28	20°	Narrow Round	0.365							
		SA 2300 SA 2301	90°	Wide Round	0.213						
			60°	Round	0.213						



1 1/2" SA (Set-up #) - A - 00

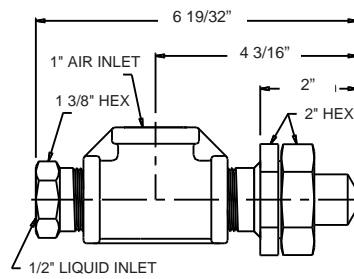
Larger sizes and flow rates available upon request.

Standard Materials: 316 Stainless Steel OR Cobalt Alloy 6 wear components.

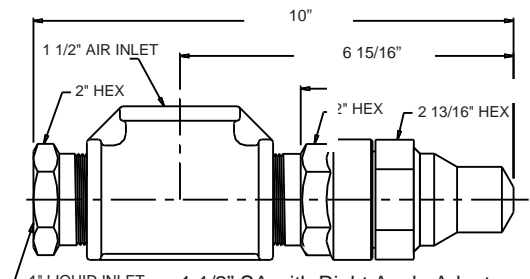
Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

The SpiralAir can be configured to fit any installation requirement. The examples shown are just a few of the custom assemblies available. For more information, contact BETE Applications Engineering.

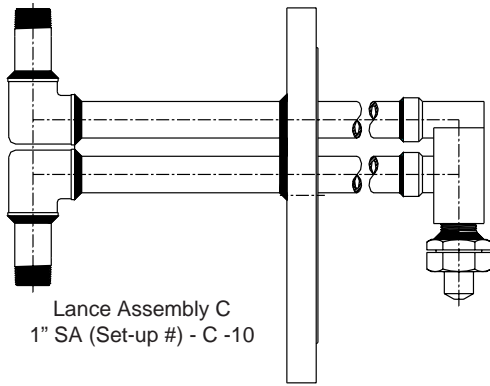
A guide with additional engineering data about the SpiralAir series is available on request.



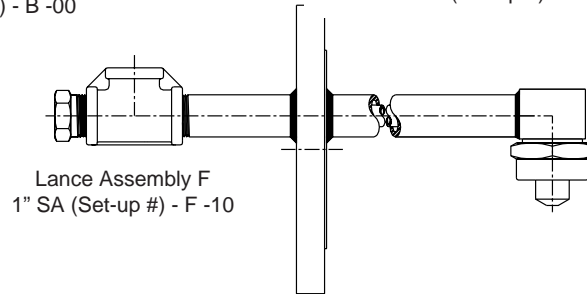
1" SA with Right Angle Adapter
1" SA (Set-up #) - B -00



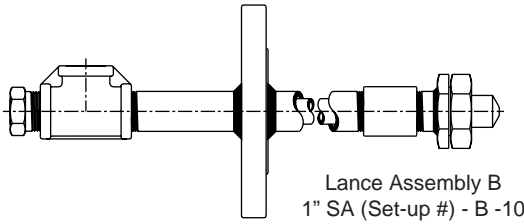
1 1/2" SA with Right Angle Adapter
1 1/2" SA (Set-up #) - B -00



Lance Assembly C
1" SA (Set-up #) - C -10



Lance Assembly F
1" SA (Set-up #) - F -10



Lance Assembly B
1" SA (Set-up #) - B -10

Since very small variations in liquid pressure produce large variations in liquid flow, BETE recommends using a metering pump or other flow metering device to control the liquid flow.

AIR ATOMIZING

CALL 413-772-0846
Call for the name of your nearest BETE representative.

SpiralAir Set-up Flow Rates
Narrow, Wide and Flat Fan Patterns 1" and 1 1/2" Pipe Size

Pipe Size	Spiral Tip Rating	30 PSI Air			40 PSI Air			50 PSI Air			60 PSI Air			70 PSI Air			80 PSI Air			90 PSI Air			100 PSI Air																											
		GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM	GPM	liquid	SCFM																									
1"	14	0.33	26	37	0.33	34	52	0.33	44	68	0.33	53	85	0.33	64	103	0.33	75	121	0.33	86	139	0.33	98	158	0.66	28	24	0.66	37	34	0.66	46	45	0.66	56	56	0.66	67	68	0.66	78	79	0.66	90	92	0.66	102	104	
		1.00	30	19	1.00	39	27	1.00	48	35	1.00	58	44	1.00	69	53	1.00	80	62	1.00	92	71	1.00	104	81	1.00	30	19	1.00	39	27	1.00	48	35	1.00	58	44	1.00	69	53	1.00	80	62	1.00	92	71	1.00	104	81	
		1.33	31	16	1.33	40	22	1.33	50	30	1.33	60	37	1.33	71	44	1.33	82	52	1.33	94	60	1.33	106	68	1.33	31	16	1.33	40	22	1.33	50	30	1.33	60	37	1.33	71	44	1.33	82	52	1.33	94	60	1.33	106	68	
		1.66	32	14	1.66	41	20	1.66	51	26	1.66	61	32	1.66	72	39	1.66	83	45	1.66	95	52	1.66	107	59	1.66	32	14	1.66	41	20	1.66	51	26	1.66	61	32	1.66	72	39	1.66	83	45	1.66	95	52	1.66	107	59	
		2.00	33	12	2.00	42	18	2.00	52	23	2.00	62	29	2.00	73	35	2.00	85	41	2.00	96	47	2.00	109	53	2.00	33	12	2.00	42	18	2.00	52	23	2.00	62	29	2.00	73	35	2.00	85	41	2.00	96	47	2.00	109	53	
		2.33	34	11	2.33	43	16	2.33	53	21	2.33	63	26	2.33	74	31	2.33	86	37	2.33	98	43	2.33	110	48	2.33	34	11	2.33	43	16	2.33	53	21	2.33	63	26	2.33	74	31	2.33	86	37	2.33	98	43	2.33	110	48	
		2.66	35	10	2.66	44	15	2.66	54	19	2.66	64	24	2.66	75	29	2.66	87	34	2.66	99	39	2.66	111	45	2.66	35	10	2.66	44	15	2.66	54	19	2.66	64	24	2.66	75	29	2.66	87	34	2.66	99	39	2.66	111	45	
	3.00	35	10	3.00	45	14	3.00	55	18	3.00	65	22	3.00	76	27	3.00	88	32	3.00	100	37	3.00	112	42	3.00	35	10	3.00	45	14	3.00	55	18	3.00	65	22	3.00	76	27	3.00	88	32	3.00	100	37	3.00	112	42		
	1 1/2"	20	1.0	27	38	1.0	34	52	1.0	42	65	1.0	51	79	1.0	59	92	1.0	69	106	1.0	78	120	1.0	88	133	1.0	27	38	1.0	34	52	1.0	42	65	1.0	51	79	1.0	59	92	1.0	69	106	1.0	78	120	1.0	88	133
			2.0	29	27	2.0	37	36	2.0	45	45	2.0	54	55	2.0	63	64	2.0	72	74	2.0	82	84	2.0	92	93	2.0	29	27	2.0	37	36	2.0	45	45	2.0	54	55	2.0	63	64	2.0	72	74	2.0	82	84	2.0	92	93
			3.0	31	22	3.0	39	29	3.0	47	37	3.0	56	45	3.0	65	52	3.0	75	60	3.0	84	68	3.0	94	76	3.0	31	22	3.0	39	29	3.0	47	37	3.0	56	45	3.0	65	52	3.0	75	60	3.0	84	68	3.0	94	76
			4.0	33	19	4.0	41	25	4.0	49	32	4.0	58	38	4.0	67	45	4.0	76	52	4.0	86	58	4.0	96	65	4.0	33	19	4.0	41	25	4.0	49	32	4.0	58	38	4.0	67	45	4.0	76	52	4.0	86	58	4.0	96	65
			5.0	35	17	5.0	42	22	5.0	51	28	5.0	59	34	5.0	69	40	5.0	78	46	5.0	88	52	5.0	98	58	5.0	35	17	5.0	42	22	5.0	51	28	5.0	59	34	5.0	69	40	5.0	78	46	5.0	88	52	5.0	98	58
			6.0	35	15	6.0	43	20	6.0	52	26	6.0	61	31	6.0	70	36	6.0	79	42	6.0	89	47	6.0	100	53	6.0	35	15	6.0	43	20	6.0	52	26	6.0	61	31	6.0	70	36	6.0	79	42	6.0	89	47	6.0	100	53
7.0			36	14	7.0	44	19	7.0	53	24	7.0	62	29	7.0	71	34	7.0	81	39	7.0	91	44	7.0	101	49	7.0	36	14	7.0	44	19	7.0	53	24	7.0	62	29	7.0	71	34	7.0	81	39	7.0	91	44	7.0	101	49	
8.0		37	13	8.0	45	18	8.0	54	22	8.0	63	27	8.0	72	31	8.0	82	36	8.0	92	41	8.0	102	45	8.0	37	13	8.0	45	18	8.0	54	22	8.0	63	27	8.0	72	31	8.0	82	36	8.0	92	41	8.0	102	45		
9.0		38	12	9.0	46	17	9.0	55	21	9.0	64	25	9.0	73	30	9.0	83	34	9.0	93	38	9.0	103	43	9.0	38	12	9.0	46	17	9.0	55	21	9.0	64	25	9.0	73	30	9.0	83	34	9.0	93	38	9.0	103	43		
10		39	12	10	47	16	10	56	20	10	65	24	10	74	28	10	84	32	10	94	36	10	104	41	10	39	12	10	47	16	10	56	20	10	65	24	10	74	28	10	84	32	10	94	36	10	104	41		
24		5.0	39	87	5.0	49	106	5.0	59	127	5.0	68	152	5.0	78	181	5.0	87	213	5.0	95	248	5.0	39	87	5.0	49	106	5.0	59	127	5.0	68	152	5.0	78	181	5.0	87	213	5.0	95	248							
		8.0	42	68	8.0	53	83	8.0	62	101	8.0	72	122	8.0	82	145	8.0	91	173	8.0	100	203	8.0	42	68	8.0	53	83	8.0	62	101	8.0	72	122	8.0	82	145	8.0	91	173	8.0	100	203							
		11	47	53	11	57	66	11	67	80	11	77	98	11	86	118	11	96	141	11	105	168	11	47	53	11	57	66	11	67	80	11	77	98	11	86	118	11	96	141	11	105	168							
		14	57	62	14	67	80	14	77	98	14	87	111	14	93	126	14	102	141	14	111	139	14	57	62	14	67	80	14	77	98	14	87	111	14	93	126	14	102	141	14	111	139							
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	14	48	28	14	57	39	14	67	52	14	77	66	14	87	81	14	98	97	14	109	114	14	48	28	14	57	39	14	67	52	14	77	66	14	87	81	14	98	97	14	109	114								
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