














































## Performance Data Corrections

### Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033	400 .058	500 .090	600 .130	700 .177	800 .231	900 .293
6 x 6  .25 SQ. FT.	RETURN FACTORS —SP=1.1 TP NC + 1	CFM NC	75 —	100 10	125 17	150 22	175 26	200 31	225 35
	 4A	CFM/SIDE THROW, FT.	19 4-5-8	25 4-6-10	31 6-8-10	37 6-8-11	44 8-9-12	50 8-9-12	56 9-10-13
	 3A	CFM/SIDE THROW, FT.	19 28 4-5-8 5-8-11	25 38 4-6-10 6-9-12	31 47 6-8-10 8-10-14	37 56 6-8-11 8-11-15	44 66 8-9-12 9-12-16	50 75 8-9-12 9-12-17	56 85 9-10-13 10-13-18
	 2S  2G	CFM/SIDE THROW, FT.	37 8-9-12	50 9-10-14	62 10-11-16	75 11-12-17	88 12-13-18	100 12-13-19	113 12-14-20
 1S	CFM/SIDE THROW, FT.	75 9-11-15	100 10-12-17	125 11-14-19	150 12-15-22	175 13-16-22	200 14-17-24	225 15-18-25	
9 x 9  .56 SQ. FT.	RETURN FACTORS —SP=1.2 TP NC + 2	CFM NC	170 —	225 14	280 20	340 26	395 31	450 35	505 38
	 4A	CFM/SIDE THROW, FT.	42 6-8-12	56 7-10-14	70 10-11-15	84 10-12-16	98 11-12-17	112 11-14-19	126 12-15-20
	 3A	CFM/SIDE THROW, FT.	42 63 6-8-12 9-11-14	56 85 7-10-14 10-12-17	70 106 10-11-15 11-13-18	84 127 10-12-16 12-14-20	98 148 11-12-17 13-15-21	112 169 11-14-19 13-16-22	126 180 12-15-20 14-18-24
	 2S  2G	CFM/SIDE THROW, FT.	84 9-10-15	112 11-13-18	141 12-15-20	169 13-16-22	197 14-17-23	225 15-18-25	253 16-19-28
 1S	CFM/SIDE THROW, FT.	169 12-15-20	225 14-17-23	282 16-19-26	338 17-22-29	394 18-22-31	450 19-24-33	507 22-25-35	
12 x 12  1.0 SQ. FT.	RETURN FACTORS —SP=1.3 TP NC + 4	CFM NC	300 10	400 17	500 23	600 28	700 33	800 36	900 39
	 4A	CFM/SIDE THROW, FT.	75 8-13-15	100 11-14-18	125 13-15-21	150 14-17-22	175 14-18-24	200 15-20-25	225 17-21-27
	 3A	CFM/SIDE THROW, FT.	75 112 8-13-15 11-14-18	100 150 11-14-18 12-15-21	125 187 13-15-21 14-17-24	150 225 14-17-22 15-19-28	175 262 14-18-24 16-20-27	200 300 15-20-25 17-21-30	225 338 17-21-27 19-22-31
	 2S  2G	CFM/SIDE THROW, FT.	150 12-15-20	200 15-17-25	250 17-19-27	300 18-20-29	350 19-21-31	400 20-25-34	450 21-25-36
 1S	CFM/SIDE THROW, FT.	300 16-20-28	400 18-22-32	500 21-25-37	600 22-26-39	700 23-28-41	800 25-29-41	900 28-33-47	
15 x 15  1.56 SQ. FT.	RETURN FACTORS —SP=1.8 TP NC + 4	CFM NC	465 10	625 19	780 25	935 30	1090 33	1250 39	1400 41
	 4A	CFM/SIDE THROW, FT.	117 13-16-21	156 14-18-24	195 16-19-27	234 18-21-29	273 19-22-30	312 20-24-33	350 21-26-35
	 3A	CFM/SIDE THROW, FT.	117 175 13-16-21 14-17-23	156 234 14-18-24 17-19-29	195 292 16-19-27 19-22-31	234 351 18-21-29 21-23-34	273 409 19-22-30 22-25-36	312 468 19-24-35 22-29-39	350 527 21-26-35 25-29-42
	 2S  2G	CFM/SIDE THROW, FT.	234 16-20-27	312 19-22-31	390 21-25-36	468 22-27-40	546 24-29-42	625 27-31-45	700 27-35-47
 1S	CFM/SIDE THROW, FT.	467 21-25-36	625 23-29-42	780 26-32-47	935 28-36-51	1090 30-39-55	1250 32-42-57	1400 36-44-61	
18 x 18  2.25 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 6	CFM NC	675 12	900 21	1125 27	1350 31	1575 36	1800 39	2025 42
	 4A	CFM/SIDE THROW, FT.	168 15-19-25	225 17-20-29	281 19-24-32	337 20-25-36	394 22-27-37	450 24-29-41	506 25-31-43
	 3A	CFM/SIDE THROW, FT.	168 253 15-19-25 17-22-29	225 338 17-20-29 20-25-33	281 422 19-24-32 23-27-38	337 506 20-25-36 25-32-42	394 590 22-27-37 26-32-45	450 675 24-29-41 27-35-48	506 760 25-31-43 32-36-51
	 2S  2G	CFM/SIDE THROW, FT.	337 19-23-32	450 22-26-38	562 24-30-43	675 26-31-46	787 30-34-49	900 30-35-53	1012 32-39-55
 1S	CFM/SIDE THROW, FT.	675 25-33-45	900 30-36-51	1125 34-42-58	1350 36-45-61	1575 39-48-66	1800 43-52-70	2025 46-55-75	































## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033	400 .058	500 .090	600 .130	700 .177	800 .231	900 .293
21 x 21  3.06 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 8	CFM NC	915 14	1225 22	1530 28	1835 32	2140 37	2450 40	2750 43
	 4A	CFM/SIDE THROW, FT.	230 18-21-30	306 19-25-34	382 21-28-39	460 23-30-41	535 25-32-44	612 26-34-46	688 28-39-51
	 3A	CFM/SIDE THROW, FT.	230 345 15-19-26 20-25-34	306 460 17-22-29 23-28-39	382 573 19-25-34 26-31-45	460 688 20-26-36 28-34-50	535 802 22-28-39 29-36-53	612 818 23-29-40 34-39-58	688 1030 25-34-45 34-43-59
	 2S  2G	CFM/SIDE THROW, FT.	458 22-27-39	612 25-31-45	765 28-35-50	917 31-39-55	1070 32-42-59	1225 35-45-62	1375 39-48-66
	 1S	CFM/SIDE THROW, FT.	917 29-37-51	1225 34-43-59	1530 39-50-67	1835 43-53-71	2140 46-56-77	2450 50-60-82	2750 53-64-88
24 x 24  4.0 SQ. FT.	RETURN FACTORS —SP=2.7 TP NC + 8	CFM NC	1200 15	1600 23	2000 29	2400 33	2800 37	3200 41	3600 44
	 4A	CFM/SIDE THROW, FT.	300 20-24-33	400 24-27-40	500 27-31-44	600 29-33-47	700 31-35-51	800 33-40-55	900 35-40-58
	 3A	CFM/SIDE THROW, FT.	300 450 20-24-33 23-28-39	400 600 24-27-40 26-31-46	500 750 27-31-44 29-36-52	600 900 29-33-47 31-38-56	700 1050 31-33-51 36-41-59	800 1200 33-40-55 36-43-64	900 1350 35-40-58 39-47-67
	 2S  2G	CFM/SIDE THROW, FT.	600 25-33-45	800 30-36-51	1000 34-42-58	1200 36-45-61	1400 39-48-66	1600 43-52-70	1800 46-55-75
	 1S	CFM/SIDE THROW, FT.	1200 35-40-59	1600 38-48-67	2000 45-54-77	2400 48-58-82	2800 51-62-90	3200 54-67-93	3600 59-70-101
30 x 30  6.25 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	1875 16	2500 24	3125 30	3750 35	4375 39	5000 42	5625 46
	 4A	CFM/SIDE THROW, FT.	468 25-31-42	625 29-36-48	782 34-40-56	937 36-44-61	1093 38-46-65	1250 40-50-69	1406 46-52-73
	 3A	CFM/SIDE THROW, FT.	468 703 25-31-42 28-34-49	625 838 29-36-48 32-39-57	782 1172 34-40-56 35-44-64	937 1405 36-44-61 39-49-69	1093 1640 38-46-65 41-49-74	1250 1875 40-50-69 44-57-78	1406 2110 46-52-73 49-60-83
	 2S  2G	CFM/SIDE THROW, FT.	937 32-40-55	1250 37-47-63	1562 42-53-72	1875 47-57-77	2187 50-60-83	2500 53-65-88	2812 57-68-95
	 1S	CFM/SIDE THROW, FT.	1875 42-53-72	2500 49-60-83	3125 56-69-93	3750 60-72-102	4375 63-77-109	5000 69-83-116	5625 72-88-123
36 x 36  9.0 SQ. FT.	RETURN FACTORS —SP=3.6 TP NC + 9	CFM NC	2700 18	3600 25	4500 31	5400 36	6300 40	7200 44	8100 48
	 4A	CFM/SIDE THROW, FT.	675 30-37-51	900 34-41-57	1125 39-46-67	1350 41-51-74	1575 44-53-78	1800 51-57-83	2025 51-64-87
	 3A	CFM/SIDE THROW, FT.	675 1010 30-37-51 34-44-60	900 1350 34-41-57 40-48-68	1125 1687 39-46-67 46-56-78	1350 2025 41-51-74 48-60-82	1575 2362 44-53-78 52-64-88	1800 2700 51-57-83 59-70-94	2025 3038 51-64-87 62-74-100
	 2S  2G	CFM/SIDE THROW, FT.	1350 40-45-67	1800 43-54-78	2250 50-61-86	2700 54-65-92	3150 58-70-101	3600 61-76-104	4050 67-79-113
	 1S	CFM/SIDE THROW, FT.	2700 49-61-85	3600 59-70-99	4500 66-80-114	5400 72-85-122	6300 76-91-131	7200 82-97-142	8100 87-106-150
























# Performance Data Corrections

## Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	400 .026	600 .058	800 .103	900 .130	1000 .161	1200 .231	1400 .315
6" ROUND	RETURN FACTORS —SP=0.7 TP NC + 0	CFM NC	78 —	118 11	157 19	176 21	196 25	235 30	274 35
	 4A	CFM/SIDE THROW, FT.	20 2-4-6	29 4-7-10	39 6-8-11	44 7-8-12	49 7-8-13	59 8-9-14	69 8-10-15
	 3A	CFM/SIDE THROW, FT.	20 2-4-6 29 2-4-7	29 4-7-10 44 4-8-11	39 6-8-11 69 7-9-12	44 7-8-12 66 8-9-13	49 7-8-13 74 8-9-14	59 8-9-14 88 9-10-15	69 8-10-15 103 9-11-17
	 2S  2G	CFM/SIDE THROW, FT.	39 3-4-9	59 5-6-13	78 6-9-15	88 6-10-16	98 7-11-17	118 8-13-18	137 9-14-20
	 1S	CFM/SIDE THROW, FT.	78 4-7-14	118 6-10-18	157 9-14-21	176 10-15-23	196 11-16-24	235 12-18-26	274 13-19-28
8" ROUND	RETURN FACTORS —SP=0.8 TP NC + 0	CFM NC	140 —	209 13	279 21	314 23	349 27	419 32	489 37
	 4A	CFM/SIDE THROW, FT.	35 4-8-10	52 6-9-13	70 8-10-15	79 9-11-15	87 9-12-17	105 10-13-19	122 11-14-20
	 3A	CFM/SIDE THROW, FT.	35 4-8-10 52 4-9-11	52 6-9-13 79 7-10-14	70 8-10-15 105 9-11-17	79 9-11-15 118 10-12-17	87 9-12-17 131 10-13-18	105 10-13-19 157 11-14-21	122 11-14-20 183 12-15-22
	 2S  2G	CFM/SIDE THROW, FT.	70 5-17-14	105 6-9-17	140 8-13-20	157 9-14-22	175 10-15-23	209 12-17-25	244 10-13-1
	 1S	CFM/SIDE THROW, FT.	140 7-12-19	209 9-14-24	279 13-19-28	314 14-21-30	349 15-22-32	419 16-24-34	489 17-26-37
10" ROUND	RETURN FACTORS —SP=0.9 TP NC + 2	CFM NC	218 —	327 16	436 24	491 26	545 30	654 35	763 40
	 4A	CFM/SIDE THROW, FT.	55 4-8-12	82 8-11-17	109 10-13-19	123 11-14-20	136 12-15-21	164 12-16-23	191 13-17-24
	 3A	CFM/SIDE THROW, FT.	55 4-8-12 82 4-9-13	82 8-11-17 123 9-12-19	109 10-13-19 164 11-14-21	123 11-14-20 222 12-15-22	136 12-15-21 204 13-17-23	164 12-16-23 245 13-18-25	191 13-17-24 286 14-19-26
	 2S  2G	CFM/SIDE THROW, FT.	109 5-7-15	164 7-11-22	218 10-15-25	245 12-17-27	273 13-19-28	327 14-21-30	382 15-23-34
	 1S	CFM/SIDE THROW, FT.	218 7-12-22	327 12-17-31	436 15-23-25	491 17-26-37	545 19-27-39	654 20-29-42	763 22-32-45
12" ROUND	RETURN FACTORS —SP=1.0 TP NC + 3	CFM NC	314 —	471 18	628 26	707 28	785 32	942 37	1099 42
	 4A	CFM/SIDE THROW, FT.	79 6-9-15	118 8-11-18	157 10-15-23	177 13-17-24	196 14-18-25	236 15-20-28	275 17-21-30
	 3A	CFM/SIDE THROW, FT.	79 6-9-15 118 7-10-17	118 8-11-18 177 9-12-20	157 10-15-23 236 11-17-25	177 13-17-24 265 14-19-26	196 14-18-25 294 15-20-28	236 15-20-28 353 17-23-31	275 17-21-30 412 19-23-33
	 2S  2G	CFM/SIDE THROW, FT.	157 6-9-19	236 9-14-26	314 11-16-29	353 14-21-32	393 15-23-34	471 16-24-38	550 18-27-40
	 1S	CFM/SIDE THROW, FT.	314 9-14-28	471 14-21-37	628 19-28-42	707 21-32-45	785 23-34-47	942 24-36-51	1099 27-39-55
14" ROUND	RETURN FACTORS —SP=1.1 TP NC + 4	CFM NC	427 —	641 20	854 28	961 30	1068 34	1282 39	1495 44
	 4A	CFM/SIDE THROW, FT.	107 7-10-19	160 10-15-23	214 14-19-26	240 15-20-29	267 17-21-30	320 19-23-32	374 21-26-38
	 3A	CFM/SIDE THROW, FT.	107 7-10-19 160 8-11-21	160 10-15-23 240 11-17-25	214 14-19-26 320 15-21-28	240 15-20-29 360 17-22-32	267 17-21-30 401 19-23-33	320 19-23-32 481 21-25-35	374 21-26-38 561 23-29-42
	 2S  2G	CFM/SIDE THROW, FT.	214 7-11-22	320 11-16-31	427 14-22-36	481 16-24-38	534 18-27-40	641 19-28-43	748 21-31-47
	 1S	CFM/SIDE THROW, FT.	427 11-16-32	641 16-24-42	854 24-33-50	961 24-37-52	1068 27-39-55	1282 29-42-60	1495 33-45-65
16" ROUND	RETURN FACTORS —SP=1.3 TP NC + 6	CFM NC	558 —	837 22	1116 30	1256 32	1395 36	1674 41	1953 46
	 4A	CFM/SIDE THROW, FT.	140 8-12-21	209 12-19-26	279 17-21-31	314 19-23-32	349 20-25-35	419 22-28-42	488 24-30-48
	 3A	CFM/SIDE THROW, FT.	140 8-12-21 209 9-13-23	209 12-19-26 314 13-21-29	279 17-21-31 419 19-23-34	314 19-23-32 471 21-25-35	349 20-25-35 523 22-28-38	419 22-28-42 628 24-31-46	488 24-30-48 732 26-33-53
	 2S  2G	CFM/SIDE THROW, FT.	279 8-13-25	419 13-19-35	558 16-25-41	628 19-28-43	688 20-30-45	837 23-34-49	977 26-37-54
	 1S	CFM/SIDE THROW, FT.	558 13-19-38	837 19-28-49	1116 25-38-57	1256 28-42-60	1395 31-44-63	1674 36-48-69	1953 42-52-75

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293		
			CFM NC	110 —	150 14	185 20	225 25	260 29	300 33	335 37	A	B	A	B	A	B	A
9 x 6  .375 SQ. FT.	RETURN FACTORS —SP=1.2 TP NC + 0	CFM NC	110 —		150 14		185 20		225 25		260 29		300 33		335 37		
	 4B	CFM/SIDE THROW, FT.	37 7-11-13	18 5-6-10	50 10-12-16	25 6-7-11	62 11-13-18	31 7-10-12	75 12-14-19	37 7-10-13	87 12-16-20	44 10-11-14	100 13-17-22	50 10-12-15	112 14-18-23	56 11-12-16	
	 3A1	CFM/SIDE THROW, FT.	47 10-11-14	18 5-6-10	62 11-12-17	25 6-7-11	78 12-13-19	31 7-10-12	94 13-14-20	37 7-10-13	109 14-16-22	44 10-11-14	125 14-17-23	50 10-12-15	140 16-18-26	56 11-12-16	
	 3A2	CFM/SIDE THROW, FT.	42 8-12-14	35 6-8-13	55 10-13-17	47 8-10-14	70 12-14-19	58 10-12-16	84 13-16-21	70 10-13-17	98 13-17-22	82 12-13-18	112 14-18-23	94 12-14-19	126 16-19-25	105 13-16-21	
	 2A 2B	CFM/SIDE THROW, FT.	56 11-12-16		75 12-14-19		93 13-16-22		112 14-19-23		131 16-19-24		150 17-20-26		168 18-22-28		
	 2C 2E	 2D 2F	CFM/SIDE THROW, FT.	75 12-14-19	37 8-12-14	100 13-16-22	50 10-13-17	125 14-18-25	62 12-14-19	150 16-19-23	75 13-16-21	175 17-21-29	87 13-17-25	200 18-22-31	100 14-18-23	225 20-23-33	112 16-20-25
 1A 1B	CFM/SIDE THROW, FT.	112 14-17-23		150 17-19-29		187 19-22-31		225 21-23-34		262 22-25-36		300 23-29-39		337 25-29-42			
12 x 6  .50 SQ. FT.	RETURN FACTORS —SP=1.6 TP NC + 1	CFM NC	150 —		200 14		250 20		300 26		350 31		400 35		450 39		
	 4B	 4C	CFM/SIDE THROW, FT.	56 11-13-17	18 5-6-10	75 12-14-19	25 6-7-11	94 13-17-22	31 7-10-12	113 14-18-23	37 7-10-13	131 16-19-26	44 10-11-14	150 17-20-26	50 10-11-14	169 18-22-29	56 11-12-16
	 3A1	CFM/SIDE THROW, FT.	66 11-13-18	18 5-6-10	87 12-14-20	25 6-7-11	109 13-17-23	31 7-10-12	131 14-18-26	37 7-10-13	153 16-19-26	44 10-11-14	175 17-20-29	50 10-11-14	197 18-22-30	56 11-12-16	
	 3B	CFM/SIDE THROW, FT.	75 11-16-20	37 8-12-14	100 14-18-23	50 10-13-17	126 16-20-27	62 12-14-19	150 18-22-29	75 13-16-21	176 18-23-31	87 13-17-25	200 20-25-32	100 14-18-23	226 22-27-34	112 16-20-25	
	 2A 2B	CFM/SIDE THROW, FT.	75 11-13-18		100 12-14-20		125 13-17-23		150 14-18-26		175 16-19-26		200 17-20-29		225 18-22-30		
	 2C 2E	 2D 2F	CFM/SIDE THROW, FT.	112 14-17-23	37 8-12-14	150 17-19-29	50 10-13-17	188 19-22-31	62 12-14-19	225 21-23-34	75 13-16-21	263 22-25-36	87 13-17-25	300 23-29-39	100 14-18-23	338 25-29-42	112 16-20-25
 1A 1B	CFM/SIDE THROW, FT.	150 14-17-23		200 17-19-29		250 19-22-31		300 21-23-34		350 22-25-36		400 23-29-39		450 25-29-42			
15 x 6  .625 SQ. FT.	RETURN FACTORS —SP=1.9 TP NC + 1	CFM NC	190 —		250 15		310 21		375 27		440 32		500 36		565 40		
	 4B	 4C	CFM/SIDE THROW, FT.	75 11-13-18	18 5-6-10	100 12-14-20	25 6-7-11	125 13-17-23	31 7-10-12	150 14-18-26	37 7-10-13	175 16-19-26	44 10-11-14	200 17-20-29	50 10-11-14	225 18-22-30	56 11-12-16
	 4E	CFM/SIDE THROW, FT.	56 11-12-16	37 10-11-14	75 12-14-19	50 11-12-17	94 12-17-22	62 12-13-18	113 14-18-23	75 13-14-20	131 16-19-26	87 14-16-22	150 16-20-26	100 14-17-23	169 18-22-29	56 16-18-26	
	 3A1	CFM/SIDE THROW, FT.	84 12-13-19	18 5-6-10	112 13-16-22	25 6-7-11	140 14-18-24	31 7-10-12	169 16-19-26	37 7-10-13	197 17-20-28	44 10-11-14	225 18-22-30	50 10-11-14	253 19-23-34	56 11-12-16	
	 2A 2B	CFM/SIDE THROW, FT.	94 12-14-20		125 13-16-23		156 14-19-26		187 16-20-28		219 17-22-30		250 18-23-31		281 19-26-35		
	 2C 2E	 2D 2F	CFM/SIDE THROW, FT.	150 14-17-23	37 8-12-14	200 17-19-29	50 10-13-17	250 19-22-31	62 12-14-19	300 21-23-34	75 13-16-21	350 22-25-36	87 13-17-25	400 23-29-39	100 14-18-23	450 25-29-42	112 16-20-25
 1A 1B	CFM/SIDE THROW, FT.	188 16-19-26		250 18-22-30		312 21-25-34		375 22-29-38		438 23-29-40		500 25-31-43		563 29-32-45			

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

# Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST






































NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	225 —	300 16	375 22	450 28	525 33	600 37	675 41						
18 x 6  SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 2	CFM NC	225 —	300 16	375 22	450 28	525 33	600 37	675 41							
	4B  4C	CFM/SIDE THROW, FT.	94 18 12-14-20 5-6-10	125 25 13-17-23 6-7-11	156 31 14-19-25 7-10-12	188 37 16-20-28 7-10-13	218 44 17-22-30 10-11-14	250 50 18-23-31 10-11-14	281 56 19-26-35 11-12-16							
	4E	CFM/SIDE THROW, FT.	56 56 11-13-17 11-13-17	75 75 12-14-19 12-14-19	94 94 13-17-22 13-17-22	113 113 14-18-23 14-18-23	131 131 16-19-26 16-19-26	150 150 17-20-26 17-20-26	169 169 18-22-29 18-22-29							
	3A1	CFM/SIDE THROW, FT.	103 18 12-14-20 5-6-10	137 25 13-17-23 6-7-11	172 31 14-19-25 7-10-12	206 37 16-20-28 7-10-13	240 44 17-22-30 10-11-14	275 50 18-23-31 10-11-14	309 56 19-26-35 11-12-16							
	2A 2B	CFM/SIDE THROW, FT.	112 13-16-22	150 16-18-26	187 18-20-29	225 19-22-31	262 20-23-34	300 22-26-36	337 23-26-38							
	2C 2E  2D 2F	CFM/SIDE THROW, FT.	187 37 16-19-26 8-12-14	250 50 18-22-30 10-13-17	313 62 21-25-34 12-14-19	375 75 22-29-38 13-16-21	438 87 23-29-40 13-17-22	500 100 25-31-43 14-18-23	563 112 29-32-45 16-19-25							
	1A 1B	CFM/SIDE THROW, FT.	225 17-21-29	300 19-23-32	375 22-26-38	450 23-29-42	525 25-30-44	600 29-32-47	675 29-36-52							
21 x 6  SQ. FT.	RETURN FACTORS —SP=3.2 TP NC + 3	CFM NC	260 —	350 16	435 22	525 29	610 33	700 38	785 41							
	4B  4C	CFM/SIDE THROW, FT.	112 18 13-16-22 5-6-10	150 25 16-18-26 6-7-11	187 31 18-20-29 7-10-12	225 37 19-22-31 7-10-13	262 44 20-23-34 10-11-14	300 50 22-26-36 10-11-14	337 56 23-26-38 11-12-16							
	4E	CFM/SIDE THROW, FT.	75 56 11-13-18 11-13-17	100 75 12-14-20 12-14-19	125 94 13-17-23 13-17-22	150 113 14-18-26 14-18-23	175 131 16-19-26 16-19-26	200 150 17-20-29 17-20-26	225 169 18-22-30 18-22-29							
	3A1	CFM/SIDE THROW, FT.	122 18 13-16-22 5-6-10	162 25 16-18-26 6-7-11	203 31 18-20-29 7-10-12	244 37 19-22-31 7-10-13	284 44 20-23-34 10-11-14	325 50 22-26-36 10-11-14	365 56 23-26-38 11-12-16							
	2A 2B	CFM/SIDE THROW, FT.	131 13-16-22	175 16-18-26	218 18-20-29	262 19-22-31	306 20-23-34	350 22-26-36	393 23-26-38							
	2C 2E  2D 2F	CFM/SIDE THROW, FT.	225 37 17-21-29 8-12-14	300 50 19-23-32 10-13-17	375 62 22-26-38 12-14-19	450 75 23-29-42 13-16-21	525 87 25-30-44 13-17-22	600 100 29-32-47 14-18-23	675 112 29-36-49 16-19-25							
	1A 1B	CFM/SIDE THROW, FT.	262 17-21-29	350 19-23-32	437 22-26-38	525 23-29-42	612 25-30-44	700 29-32-47	787 29-36-49							
24 x 6  SQ. FT.	RETURN FACTORS —SP=3.9 TP NC + 4	CFM NC	300 —	400 16	500 23	600 30	700 34	800 39	900 42							
	4B  4C	CFM/SIDE THROW, FT.	131 18 13-16-22 5-6-10	175 25 16-18-26 6-7-11	219 31 18-20-29 7-10-12	263 37 19-22-31 7-10-13	306 44 20-23-34 10-11-14	350 50 22-26-36 10-11-14	394 56 23-26-38 11-12-16							
	4E	CFM/SIDE THROW, FT.	75 75 11-13-18 11-13-18	100 100 12-14-20 12-14-20	125 125 13-17-23 13-17-23	150 150 14-18-26 14-18-26	175 175 16-19-26 16-19-26	200 200 17-20-29 17-20-29	225 225 18-22-30 18-22-30							
	3A1	CFM/SIDE THROW, FT.	141 18 13-16-22 5-6-10	187 25 16-18-26 6-7-11	234 31 18-20-29 7-10-12	281 37 19-22-31 7-10-13	328 44 20-23-34 10-11-14	375 50 22-26-36 10-11-14	422 56 23-26-38 11-12-16							
	2A 2B	CFM/SIDE THROW, FT.	150 13-16-22	200 16-18-26	250 18-20-29	300 19-22-31	350 20-23-34	400 22-26-36	450 23-26-38							
	2C 2E  2D 2F	CFM/SIDE THROW, FT.	260 37 17-21-29 8-12-14	350 50 19-23-32 10-13-17	438 62 22-26-38 12-14-19	525 75 23-29-42 13-16-21	613 87 25-30-44 13-17-22	700 100 29-32-47 14-18-23	788 112 29-36-49 16-19-25							
	1A 1B	CFM/SIDE THROW, FT.	300 18-22-31	400 21-25-36	500 23-29-42	600 25-30-44	700 29-32-47	800 29-34-51	900 31-38-53							

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown: Throw correction factor for "B" direction is: A x .82 = B.

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST











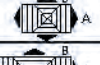

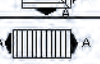



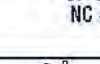



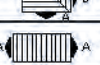



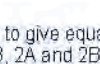
NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A
30 x 6  1.25 SQ. FT.	RETURN FACTORS —SP=3.2 TP NC + 3	CFM NC	375 —		500 17		625 24		750 30		875 35		1000 40		1125 43	
	 4B  4C	CFM/SIDE THROW, FT.	169	18	225	25	281	31	338	37	393	44	450	50	506	56
	 4E	CFM/SIDE THROW, FT.	94	94	125	125	166	166	188	188	219	219	260	260	282	282
	 3A1	CFM/SIDE THROW, FT.	178	18	237	25	297	31	356	37	415	44	475	50	534	56
	 2A  2B	CFM/SIDE THROW, FT.	187		250		312		375		437		500		562	
	 2C  2D  2E  2F	CFM/SIDE THROW, FT.	337	37	450	50	563	62	675	75	788	87	900	100	1013	112
 1A  1B	CFM/SIDE THROW, FT.	375		500		625		750		875		1000		1125		
12 x 9  .75 SQ. FT.	RETURN FACTORS —SP=3.9 TP NC + 4	CFM NC	225 —		300 17		375 23		450 28		525 33		600 36		675 40	
	 4B  4C	CFM/SIDE THROW, FT.	70	42	94	56	117	70	141	84	164	98	188	112	211	126
	 3A1	CFM/SIDE THROW, FT.	91	42	121	56	152	70	183	84	213	98	244	112	274	126
	 3A2	CFM/SIDE THROW, FT.	75	75	100	100	125	125	150	150	175	175	200	200	225	225
	 2A  2B	CFM/SIDE THROW, FT.	112		150		187		225		262		300		337	
	 2C  2D  2E  2F	CFM/SIDE THROW, FT.	141	84	188	112	234	141	281	169	328	197	375	225	422	263
 1A  1B	CFM/SIDE THROW, FT.	225		300		375		450		525		600		675		
15 x 9  .93 SQ. FT.	RETURN FACTORS —SP=1.7 TP NC + 3	CFM NC	280 —		375 18		470 24		565 29		655 34		750 37		845 41	
	 4B  4C	CFM/SIDE THROW, FT.	98	42	131	56	165	70	198	84	230	98	263	112	296	126
	 4E	CFM/SIDE THROW, FT.	70	70	94	94	117	117	141	141	164	164	188	188	211	211
	 3A1	CFM/SIDE THROW, FT.	120	42	159	56	200	70	240	84	279	98	319	112	359	126
	 3A2	CFM/SIDE THROW, FT.	117	82	155	110	196	137	233	165	272	192	312	219	351	247
	 2A  2B	CFM/SIDE THROW, FT.	140		187		235		281		328		375		422	
 2C  2D  2E  2F	CFM/SIDE THROW, FT.	197	84	263	112	329	141	394	169	459	197	525	225	592	263	
 1A  1B	CFM/SIDE THROW, FT.	281		375		470		563		656		750		845		

**Notes:**

- Core style 4E is sized to give equal flow as near as possible in directions A and B.
- For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST































NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293			
			CFM NC	—	A	B	A	B	A	B	A	B	A	B	A	B	A	B
18 x 9  1.125 SQ. FT.	RETURN FACTORS	—SP=2.1 TP NC + 3	335 —	450 19	560 25	675 30	790 35	900 38	1010 42									
	 4B	 4C	CFM/SIDE THROW, FT.	126 42 14-17-23 6-8-13	169 56 17-19-29 8-10-14	211 70 19-22-31 10-12-16	254 84 21-23-34 10-13-17	296 98 22-25-36 12-13-18	338 112 23-27-39 12-14-19	380 126 25-29-42 13-16-21								
	 4E		CFM/SIDE THROW, FT.	99 70 13-16-22 12-14-19	132 94 14-19-25 13-16-22	164 117 16-21-29 14-19-25	197 141 17-22-30 16-19-29	230 164 18-23-32 17-21-29	263 188 19-25-34 18-22-31	296 211 21-29-38 19-23-32								
	 3A1		CFM/SIDE THROW, FT.	147 42 14-17-23 6-8-13	197 56 17-19-29 8-10-14	246 70 18-22-31 10-12-16	295 84 21-23-34 10-13-17	345 98 22-25-36 12-13-18	394 112 23-27-39 12-14-19	443 126 25-29-42 13-16-21								
	 3B		CFM/SIDE THROW, FT.	168 84 17-21-28 13-15-20	225 112 19-23-32 14-17-22	281 141 21-27-36 15-20-25	337 169 23-28-40 17-21-27	394 197 25-30-42 18-22-31	450 225 27-32-46 20-24-31	506 253 28-34-47 21-25-34								
	 2A 2B		CFM/SIDE THROW, FT.	163 16-19-26	225 18-22-30	281 21-25-34	337 22-29-38	394 23-29-40	450 25-31-43	506 29-32-45								
	 2C 2E	 2D 2F	CFM/SIDE THROW, FT.	253 84 18-22-31 13-15-20	338 112 21-25-35 14-17-22	421 141 24-28-41 15-20-25	506 169 25-31-45 17-21-27	591 197 27-32-48 18-22-31	675 225 29-35-50 20-24-31	759 253 31-39-53 21-25-34								
 1A 1B		CFM/SIDE THROW, FT.	337 20-24-34	450 22-27-39	562 25-31-45	675 27-32-48	788 29-35-50	900 31-36-55	1012 34-41-57									
21 x 9  1.125 SQ. FT.	RETURN FACTORS	—SP=2.5 TP NC + 4	395 —	525 19	655 25	785 31	915 36	1050 38	1180 42									
	 4B	 4C	CFM/SIDE THROW, FT.	154 42 16-19-26 6-8-13	206 56 18-22-30 8-10-14	258 70 21-25-34 10-12-16	309 84 22-29-38 10-13-17	360 98 23-29-40 12-13-18	413 112 25-31-43 12-14-19	464 126 28-32-45 13-16-21								
	 4E		CFM/SIDE THROW, FT.	98 98 13-16-22 13-16-22	131 131 14-18-25 14-18-25	163 163 16-21-29 16-21-29	196 196 17-22-30 17-22-30	229 229 18-23-32 18-23-32	261 261 19-25-34 19-25-34	294 294 21-29-38 21-29-38								
	 3A1		CFM/SIDE THROW, FT.	175 42 16-19-26 6-8-13	234 56 18-22-30 8-10-14	292 70 21-25-34 10-12-16	351 84 22-29-38 10-13-17	410 98 23-29-40 12-13-18	468 112 25-31-43 12-14-19	527 126 29-32-45 13-16-21								
	 2A 2B		CFM/SIDE THROW, FT.	196 16-19-26	262 18-22-30	327 21-25-34	393 22-27-38	458 23-29-40	525 25-31-43	590 29-32-45								
	 2C 2E	 2D 2F	CFM/SIDE THROW, FT.	308 84 20-24-34 13-15-20	412 112 22-27-39 14-17-22	514 141 25-31-45 15-20-25	617 169 27-32-48 17-21-27	720 197 31-35-50 18-22-31	825 225 31-36-55 20-24-31	927 253 34-41-57 21-25-34								
	 1A 1B		CFM/SIDE THROW, FT.	393 21-25-35	524 24-31-42	655 27-34-48	786 29-36-50	917 31-39-55	1050 34-42-59	1180 35-45-62								
24 x 9  1.5 SQ. FT.	RETURN FACTORS	—SP=2.9 TP NC + 4	450 —	600 19	750 25	900 31	1050 36	1200 38	1350 43									
	 4B	 4C	CFM/SIDE THROW, FT.	183 42 17-21-28 7-8-14	244 56 20-24-32 8-11-15	305 70 22-27-36 11-13-17	366 84 24-29-41 11-14-18	427 98 25-31-43 13-14-20	488 112 27-34-46 13-15-21	549 126 31-35-49 14-17-22								
	 4E		CFM/SIDE THROW, FT.	126 99 15-18-25 14-17-24	169 132 18-21-31 15-20-27	211 164 21-24-34 17-22-31	253 197 22-25-36 18-24-32	295 230 24-27-39 20-25-35	337 263 25-31-42 21-27-36	379 296 27-31-45 22-31-41								
	 3A1		CFM/SIDE THROW, FT.	204 42 17-21-28 7-8-14	272 56 20-24-32 8-11-15	340 70 22-27-36 11-13-17	408 84 24-29-41 11-14-18	476 98 25-31-43 13-14-20	544 112 27-34-46 13-15-21	612 126 31-35-49 14-17-22								
	 2A 2B		CFM/SIDE THROW, FT.	225 18-22-31	300 21-25-35	375 24-28-41	450 25-31-45	525 27-32-48	600 29-35-50	675 31-39-53								
	 2C 2E	 2D 2F	CFM/SIDE THROW, FT.	365 84 21-25-35 13-15-20	488 112 24-31-42 14-17-22	609 141 27-34-48 15-20-25	731 169 29-36-50 17-21-27	853 197 31-39-55 18-22-31	975 225 34-42-59 20-24-31	1097 253 35-45-62 21-25-34								
	 1A 1B		CFM/SIDE THROW, FT.	450 21-25-35	600 24-31-42	750 27-34-48	900 29-36-50	1050 31-39-55	1200 34-42-59	1350 35-45-62								

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
30 x 9  1.875 SQ. FT.	RETURN FACTORS —SP=3.9 TP NG + 5	CFM NC	560 —		750 20		935 26		1125 32		1310 37		1500 39		1685 44	
	 4B  4C	CFM/SIDE THROW, FT.	239 18-22-31	42 7-8-14	319 21-25-35	56 8-11-15	398 24-28-41	70 11-13-17	478 25-31-45	84 11-14-18	557 27-32-48	98 13-14-20	638 29-35-50	112 13-15-21	716 31-39-53	126 14-17-22
	 4E	CFM/SIDE THROW, FT.	155 17-21-28	126 15-18-25	206 20-24-32	169 18-21-31	258 22-27-36	211 21-24-34	310 24-31-41	253 22-25-36	361 25-31-42	295 24-27-39	413 27-34-46	337 25-29-42	465 31-35-49	379 27-31-45
	 3A1	CFM/SIDE THROW, FT.	259 18-22-31	42 7-8-14	347 21-25-35	56 8-11-15	433 24-28-41	70 11-13-17	520 25-31-45	84 11-14-18	606 27-32-48	98 13-14-20	694 29-35-50	112 13-15-21	779 31-39-53	126 14-17-22
	 2A  2B	CFM/SIDE THROW, FT.	281 20-24-34		375 22-27-39		468 25-31-45		562 27-32-48		655 29-35-50		750 31-36-55		842 34-41-57	
	 2C  2E	CFM/SIDE THROW, FT.	476 22-27-39	84 13-15-20	638 25-31-45	112 14-17-22	796 28-35-50	141 15-20-25	956 31-39-55	169 17-21-27	1113 32-42-59	197 18-22-31	1275 35-45-62	225 20-24-31	1432 39-49-66	253 21-25-34
	 1A  1B	CFM/SIDE THROW, FT.	562 22-27-39		750 25-31-45		937 28-35-50		1125 31-39-55		1310 32-42-59		1500 35-45-62		1685 39-49-66	
36 x 9  2.25 SQ. FT.	RETURN FACTORS —SP=5.0 TP NG + 6	CFM NC	675 —		900 21		1125 27		1350 33		1575 38		1800 40		2025 44	
	 4B  4C	CFM/SIDE THROW, FT.	295 20-24-34	42 7-8-14	394 22-27-39	56 8-11-15	492 25-31-45	70 11-13-17	591 27-32-48	84 11-14-18	688 29-35-50	98 13-14-20	788 31-36-55	112 13-15-21	886 34-41-57	126 14-17-22
	 4E	CFM/SIDE THROW, FT.	188 17-21-28	155 17-21-28	244 20-24-32	206 20-24-32	305 22-27-36	258 22-27-36	366 24-31-41	310 24-31-41	427 25-31-42	361 25-31-42	488 27-34-46	413 27-34-46	549 31-35-49	465 31-35-49
	 3A1	CFM/SIDE THROW, FT.	316 20-24-34	42 7-8-14	422 22-27-39	56 8-11-15	527 25-31-45	70 11-13-17	633 27-32-48	84 11-14-18	738 28-35-50	98 13-14-20	844 31-36-55	112 13-15-21	949 34-41-57	126 14-17-22
	 2A  2B	CFM/SIDE THROW, FT.	337 20-24-34		450 22-27-39		562 25-31-45		675 27-32-48		787 29-35-50		900 31-36-55		1012 34-41-57	
	 2C  2E	CFM/SIDE THROW, FT.	590 24-31-42	84 13-15-20	788 28-34-48	112 14-17-22	984 32-39-55	141 15-20-25	1161 34-42-57	169 17-21-27	1378 36-45-62	197 18-22-29	1575 41-49-66	225 20-24-31	1772 43-52-70	253 21-25-34
	 1A  1B	CFM/SIDE THROW, FT.	675 24-31-42		900 28-34-48		1125 32-39-55		1350 34-42-57		1575 36-45-62		1800 41-49-66		2025 43-52-70	
15 x 12  1.25 SQ. FT.	RETURN FACTORS —SP=1.6 TP NG + 2	CFM NC	375 —		500 19		625 25		750 30		875 34		1000 38		1125 41	
	 4B  4C	CFM/SIDE THROW, FT.	112 13-15-21	75 8-13-15	150 14-17-24	100 11-14-18	187 15-20-27	125 13-15-21	225 17-21-29	150 14-17-22	262 18-22-31	175 14-18-24	300 20-24-34	200 15-20-25	337 21-25-35	225 17-21-27
	 3A1	CFM/SIDE THROW, FT.	150 15-18-25	75 8-13-15	200 18-21-31	100 11-14-18	250 21-24-34	125 13-15-21	300 22-25-36	150 14-17-22	350 24-27-39	175 14-18-24	400 25-29-42	200 15-20-25	450 27-31-45	225 17-21-27
	 3A2	CFM/SIDE THROW, FT.	117 11-14-18	129 14-15-22	156 13-15-21	172 15-18-25	195 14-17-24	215 17-21-28	234 15-18-25	258 18-22-31	273 17-20-27	301 20-24-32	312 17-21-29	344 21-25-35	351 18-22-31	387 22-27-39
	 2A  2B	CFM/SIDE THROW, FT.	187 17-21-28		250 20-24-32		312 22-27-36		375 24-29-41		437 25-31-43		500 27-34-46		567 31-35-49	
	 2C  2E	CFM/SIDE THROW, FT.	225 18-22-31	150 14-17-24	300 21-25-35	200 15-20-27	375 24-28-41	250 17-22-31	450 25-31-45	300 18-24-32	525 27-32-48	350 20-25-35	600 31-35-50	400 21-27-36	675 31-39-53	450 22-31-41
	 1A  1B	CFM/SIDE THROW, FT.	375 21-25-35		500 24-31-42		625 27-34-48		750 29-36-50		875 31-39-55		1000 34-42-59		1125 35-45-62	

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown, Throw correction factor for "B" direction is: A x .82 = B.



## Performance Data Corrections

### Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST































NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	450 —	600 20	750 26	900 31	1050 35	1200 39	1350 42						
18 x 12 SQ. FT.	RETURN FACTORS —SP=1.9 TP NC + 3	CFM NC	450 —		600 20		750 26		900 31		1050 35		1200 39		1350 42	
	4B  4C	CFM/SIDE THROW, FT.	150 75	200 100	250 125	300 150	350 175	400 200	450 225							
	3A1	CFM/SIDE THROW, FT.	187 75	250 100	312 125	375 150	437 175	500 200	562 225							
	3A2	CFM/SIDE THROW, FT.	168 141	225 187	281 234	337 281	394 328	450 375	506 422							
	2A 2B	CFM/SIDE THROW, FT.	225 18-22-31	300 21-25-35	375 24-28-41	450 25-31-45	525 27-32-48	600 29-35-50	675 31-39-53							
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	300 150	400 200	500 250	600 300	700 350	800 400	900 450							
	1A 1B	CFM/SIDE THROW, FT.	450 21-25-35	600 24-31-42	750 27-34-48	900 29-36-50	1050 31-38-55	1200 34-42-59	1350 35-45-62							
21 x 12 SQ. FT.	RETURN FACTORS —SP=2.2 TP NC + 5	CFM NC	525 —		700 20		875 26		1050 31		1225 35		1400 39		1575 42	
	4B  4C	CFM/SIDE THROW, FT.	187 75	250 100	312 125	375 150	437 175	500 200	562 225							
	4E	CFM/SIDE THROW, FT.	150 112	200 150	250 187	300 225	350 282	400 300	450 337							
	3A1	CFM/SIDE THROW, FT.	225 75	300 100	375 125	450 150	525 175	600 200	675 225							
	3A2	CFM/SIDE THROW, FT.	230 148	306 187	382 246	460 285	535 345	612 384	688 443							
	2A 2B	CFM/SIDE THROW, FT.	262 18-22-31	350 21-25-35	437 24-28-41	525 25-31-45	612 27-32-48	700 29-35-50	787 31-39-53							
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	375 150	500 200	625 250	750 300	875 350	1000 400	1125 450							
1A 1B	CFM/SIDE THROW, FT.	525 22-27-39	700 25-31-45	875 28-35-50	1050 31-38-55	1225 32-42-59	1400 35-45-62	1575 38-48-66								
24 x 12 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 5	CFM NC	600 12		800 21		1000 27		1200 32		1400 36		1600 40		1800 43	
	4B  4C	CFM/SIDE THROW, FT.	225 75	300 100	375 125	450 150	525 175	600 200	675 225							
	4E	CFM/SIDE THROW, FT.	150 150	200 200	250 250	300 300	350 350	400 400	450 450							
	3A1	CFM/SIDE THROW, FT.	262 75	350 100	437 125	525 150	612 175	700 200	787 225							
	3B	CFM/SIDE THROW, FT.	300 150	400 200	500 250	600 300	700 350	800 400	900 450							
	2A 2B	CFM/SIDE THROW, FT.	300 20-24-34	400 22-27-39	500 25-31-45	600 27-32-48	700 29-35-50	800 31-36-55	900 34-41-57							
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	450 150	600 200	750 250	900 300	1050 350	1200 400	1350 450							
1A 1B	CFM/SIDE THROW, FT.	600 24-31-42	800 28-34-48	1000 32-39-55	1200 34-42-57	1400 36-45-62	1600 41-49-66	1800 43-52-70								

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST








































NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	750 15	1000 23	1250 29	1500 33	1750 37	2000 41	2250 43						
30 x 12  2.5 SQ. FT.	RETURN FACTORS —SP=3.3 TP NC + 6	CFM NC	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	
	 	CFM/SIDE THROW, FT.	300 75 20-24-34 8-13-15	400 100 22-27-39 11-14-18	500 125 25-31-45 13-15-21	600 150 27-32-48 14-17-22	700 175 29-35-50 14-18-24	800 200 31-36-55 15-20-25	900 225 34-41-57 17-21-27							
		CFM/SIDE THROW, FT.	183 183 17-21-28 17-21-28	250 250 20-24-32 20-24-32	313 313 22-27-36 22-27-36	375 375 24-31-41 24-31-41	437 437 25-31-43 25-31-43	500 500 27-34-46 27-34-46	562 562 31-35-49 31-35-49							
		CFM/SIDE THROW, FT.	337 75 20-24-34 8-13-15	450 100 22-27-39 11-14-18	562 125 25-31-45 13-15-21	675 150 27-32-48 14-17-22	787 175 29-35-50 14-18-24	900 200 31-36-55 15-20-25	1012 225 34-41-57 17-21-27							
	 	CFM/SIDE THROW, FT.	375 21-25-35	500 24-31-42	625 27-34-48	750 29-36-50	875 31-39-55	1000 34-42-59	1125 35-45-62							
	 	CFM/SIDE THROW, FT.	600 150 24-31-41 14-17-24	800 200 28-34-48 15-20-27	1000 250 32-39-55 17-22-31	1200 300 34-42-57 18-24-32	1400 350 36-45-62 20-25-35	1600 400 41-49-66 21-27-36	1800 450 43-52-70 22-31-41							
	 	CFM/SIDE THROW, FT.	750 25-31-45	1000 31-35-50	1250 34-41-57	1500 36-45-62	1750 39-48-66	2000 42-50-70	2250 45-53-74							
36 x 12  3.0 SQ. FT.	RETURN FACTORS —SP=4.0 TP NC + 7	CFM NC	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	
	 	CFM/SIDE THROW, FT.	375 75 21-25-35 8-13-15	500 100 24-31-42 11-14-18	625 125 27-34-48 13-15-21	750 150 29-36-50 14-17-22	875 175 31-39-55 14-18-24	1000 200 34-42-59 15-20-25	1125 225 35-45-62 17-21-27							
		CFM/SIDE THROW, FT.	225 225 18-22-31 18-22-31	300 300 21-25-35 21-25-35	375 375 24-28-41 24-28-41	450 450 25-31-45 25-31-45	525 525 27-32-48 27-32-48	600 600 29-35-50 29-35-50	675 675 31-38-53 31-38-53							
		CFM/SIDE THROW, FT.	412 75 21-25-35 8-13-15	550 100 24-31-42 11-14-18	687 125 27-34-48 13-15-21	825 150 29-36-50 14-17-22	962 175 31-39-55 14-18-24	1100 200 34-42-59 15-20-25	1237 225 35-45-62 17-21-27							
	 	CFM/SIDE THROW, FT.	450 21-25-35	600 24-31-42	750 27-34-48	900 29-36-50	1050 31-39-55	1200 34-42-59	1350 35-45-62							
	 	CFM/SIDE THROW, FT.	750 150 25-31-45 14-17-24	1000 200 31-35-50 15-20-27	1250 250 34-41-57 17-22-31	1500 300 36-45-62 18-24-32	1750 350 39-48-66 20-25-35	2000 400 42-50-70 21-27-36	2250 450 45-53-74 22-31-41							
	 	CFM/SIDE THROW, FT.	800 27-34-46	1200 31-39-53	1500 35-45-60	1800 39-48-64	2100 42-50-70	2400 45-55-74	2700 48-57-80							
18 x 15  1.875 SQ. FT.	RETURN FACTORS —SP=2.0 TP NC + 4	CFM NC	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	
	 	CFM/SIDE THROW, FT.	164 117 14-17-24 11-14-18	219 156 15-20-27 13-15-21	273 195 17-22-31 14-17-24	328 234 18-24-32 15-18-25	383 273 20-25-35 17-20-27	438 312 21-27-36 17-21-31	492 351 22-31-41 18-22-31							
		CFM/SIDE THROW, FT.	222 117 18-22-31 11-14-18	297 156 21-25-35 13-15-21	371 195 24-28-41 14-17-24	445 234 25-31-45 15-18-25	519 273 31-39-55 17-20-27	594 312 31-35-50 17-21-31	668 351 31-39-53 18-22-31							
		CFM/SIDE THROW, FT.	168 197 13-16-22 18-22-30	225 262 15-18-25 21-25-34	281 329 16-21-28 24-28-39	337 394 18-22-33 25-33-43	394 459 19-24-33 27-33-46	450 525 21-25-36 28-36-49	506 590 22-27-37 33-37-52							
	 	CFM/SIDE THROW, FT.	281 20-24-34	375 22-27-39	468 25-31-45	562 27-32-49	656 29-35-50	750 31-36-55	843 34-41-57							
	 	CFM/SIDE THROW, FT.	329 234 25-33-45 18-22-30	438 312 30-36-51 21-25-34	547 390 34-42-58 24-28-39	657 468 36-45-61 25-31-43	766 546 39-48-66 27-33-46	876 624 43-52-70 28-36-49	985 702 46-55-75 33-37-52							
	 	CFM/SIDE THROW, FT.	562 24-28-42	750 27-33-48	937 30-37-54	1125 33-42-58	1312 34-45-63	1500 37-48-66	1687 42-51-70							

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
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Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST


























NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A
21 x 15  2.185 SQ. FT.	RETURN FACTORS	—SP=2.1 TP NC + 5	CFM NC	655 14	875 21	1090 28	1310 33	1530 36	1750 39	1970 43						
	 4B	 4C	CFM/SIDE THROW, FT.	210 117 19-24-33 12-15-19	281 166 22-27-37 13-16-22	361 195 25-30-43 15-18-25	422 234 27-33-48 16-19-27	493 273 28-34-51 18-21-28	563 312 33-37-54 18-22-33	634 351 33-42-57 19-24-33						
	 4E		CFM/SIDE THROW, FT.	164 164 18-22-30 18-22-30	218 218 21-25-36 21-25-36	273 273 24-29-39 24-29-39	327 327 25-31-43 25-31-43	382 382 27-33-46 27-33-46	437 437 28-36-49 28-36-49	491 491 33-37-52 33-37-52						
	 3A1		CFM/SIDE THROW, FT.	269 117 19-24-33 12-15-19	359 166 22-27-37 13-16-22	448 195 25-30-43 15-18-25	639 234 27-33-48 16-19-27	629 273 28-34-51 18-21-28	719 312 33-37-54 18-22-33	809 351 33-42-57 19-24-33						
	 3A2		CFM/SIDE THROW, FT.	230 213 16-19-27 15-18-25	306 284 19-22-33 16-21-28	382 355 22-25-36 18-24-33	460 426 24-27-39 19-25-34	535 498 25-28-42 21-27-37	612 569 27-31-45 22-28-39	688 641 28-33-48 24-33-43						
	 2A	 2B	CFM/SIDE THROW, FT.	327 21-25-36	437 24-28-42	596 27-33-48	656 28-34-51	766 31-37-54	875 33-39-58	985 36-43-61						
	 2C	 2D	CFM/SIDE THROW, FT.	422 234 22-27-37 18-22-30	563 312 25-33-45 21-25-34	702 390 28-36-51 24-28-39	844 468 29-39-54 25-33-43	966 546 33-42-58 27-33-46	1126 624 36-45-63 28-36-49	1268 702 37-48-66 33-37-52						
	 2E	 2F	CFM/SIDE THROW, FT.	422 234 22-27-37 18-22-30	563 312 25-33-45 21-25-34	702 390 28-36-51 24-28-39	844 468 29-39-54 25-33-43	966 546 33-42-58 27-33-46	1126 624 36-45-63 28-36-49	1268 702 37-48-66 33-37-52						
	 1A	 1B	CFM/SIDE THROW, FT.	655 25-33-45	875 30-36-51	1092 33-42-58	1312 36-45-61	1532 39-48-66	1750 43-52-70	1970 46-55-75						
	24 x 15  2.5 SQ. FT.	RETURN FACTORS	—SP=2.6 TP NC + 6	CFM NC	750 14	1000 22	1250 29	1500 34	1750 37	2000 39	2250 44					
 4B		 4C	CFM/SIDE THROW, FT.	258 117 19-24-33 12-15-19	344 166 22-27-37 13-16-22	430 195 25-30-43 15-18-25	516 234 27-33-48 16-19-27	602 273 28-34-51 18-21-28	688 312 33-37-54 18-22-31	774 351 33-42-57 19-24-33						
 4E			CFM/SIDE THROW, FT.	164 211 18-22-30 19-24-33	218 281 21-25-36 22-27-37	273 352 24-28-39 25-30-43	327 422 25-31-43 27-33-48	382 492 27-33-46 28-34-51	437 563 28-36-49 33-37-54	491 633 33-37-52 33-42-57						
 3A1			CFM/SIDE THROW, FT.	316 117 21-25-36 12-15-19	422 166 24-28-42 13-16-22	527 195 27-33-48 15-18-25	633 234 28-34-51 16-19-27	738 273 31-37-54 18-21-28	844 312 33-39-58 18-22-31	949 351 36-43-61 19-24-33						
 3A2			CFM/SIDE THROW, FT.	300 225 18-24-33 16-19-27	400 300 22-27-37 19-22-33	500 375 25-30-43 22-25-36	600 450 27-33-48 24-27-39	700 525 28-34-51 25-28-42	800 600 31-37-54 27-33-45	900 675 33-42-57 28-33-48						
 2A		 2B	CFM/SIDE THROW, FT.	375 22-27-37	500 25-33-45	625 28-36-51	750 31-39-54	875 33-42-58	1000 36-45-63	1125 37-48-66						
 2C		 2D	CFM/SIDE THROW, FT.	516 234 24-28-42 18-22-30	688 312 27-33-48 21-25-34	860 390 30-37-54 24-28-39	1032 468 33-42-58 25-31-43	1204 546 34-45-63 27-33-46	1376 624 37-48-66 28-36-49	1548 702 42-51-70 33-37-52						
 2E		 2F	CFM/SIDE THROW, FT.	516 234 24-28-42 18-22-30	688 312 27-33-48 21-25-34	860 390 30-37-54 24-28-39	1032 468 33-42-58 25-31-43	1204 546 34-45-63 27-33-46	1376 624 37-48-66 28-36-49	1548 702 42-51-70 33-37-52						
 1A		 1B	CFM/SIDE THROW, FT.	750 27-33-48	1000 33-37-54	1250 36-43-61	1500 39-48-66	1750 41-51-70	2000 45-54-75	2250 48-57-79						
30 x 15  3.125 SQ. FT.		RETURN FACTORS	—SP=3.1 TP NC + 7	CFM NC	935 14	1250 23	1565 30	1875 36	2190 39	2500 40	2810 45					
	 4B	 4C	CFM/SIDE THROW, FT.	351 117 20-24-34 11-14-18	469 166 22-27-39 13-15-21	587 195 25-31-45 14-17-24	703 234 27-32-48 15-18-25	822 273 29-35-50 17-20-27	938 312 31-36-55 17-21-29	1054 351 34-41-57 18-22-31						
	 4E		CFM/SIDE THROW, FT.	258 211 18-22-31 18-22-31	344 281 21-25-31 21-25-35	430 352 24-28-41 24-28-41	516 422 25-31-45 25-31-45	602 492 27-32-48 27-32-48	688 583 31-35-50 31-35-50	775 633 31-38-53 31-39-53						
	 3A1		CFM/SIDE THROW, FT.	410 117 21-25-35 11-14-18	547 166 24-31-42 13-15-21	685 195 27-34-48 14-17-24	820 234 29-36-50 15-18-25	968 273 31-39-55 17-20-27	1094 312 34-42-59 17-21-29	1224 351 35-45-62 18-22-31						
	 3B		CFM/SIDE THROW, FT.	468 234 24-30-40 18-22-30	625 312 28-34-46 21-25-34	782 391 32-38-52 24-28-39	937 469 34-44-58 25-33-43	1095 547 36-44-62 27-33-46	1250 625 38-48-66 28-36-49	1406 702 44-50-70 33-37-52						
	 2A	 2B	CFM/SIDE THROW, FT.	468 22-27-39	625 25-31-45	782 28-35-50	937 31-39-55	1095 32-42-59	1250 35-45-62	1405 39-48-66						
	 2C	 2D	CFM/SIDE THROW, FT.	702 234 25-33-45 18-22-30	938 312 30-36-51 21-25-34	1175 390 34-42-58 24-28-39	1407 468 36-45-61 25-33-43	1644 546 39-48-66 27-33-46	1876 624 43-52-70 28-36-49	2108 702 51-55-75 33-37-52						
	 2E	 2F	CFM/SIDE THROW, FT.	702 234 25-33-45 18-22-30	938 312 30-36-51 21-25-34	1175 390 34-42-58 24-28-39	1407 468 36-45-61 25-33-43	1644 546 39-48-66 27-33-46	1876 624 43-52-70 28-36-49	2108 702 51-55-75 33-37-52						
	 1A	 1B	CFM/SIDE THROW, FT.	937 28-36-49	1250 33-42-57	1565 37-48-64	1875 42-51-69	2190 45-54-75	2500 48-58-79	2810 51-61-85						

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST







































NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293		
			A	B	A	B	A	B	A	B	A	B	A	B	A	B	
36 x 15  3.75 SQ. FT.	RETURN FACTORS	—SP=3.8 TP NC + 7	1125 13		1500 23		1875 31		2250 37		2625 40		3000 41		3375 46		
	 4B	 4C	CFM/SIDE	446	117	594	156	742	195	891	234	1039	273	1188	312	1336	351
			THROW, FT.	22-27-37	12-15-19	25-33-45	13-16-22	29-36-51	15-18-25	33-39-54	16-19-27	33-45-58	18-21-28	36-45-63	18-22-30	37-48-66	19-24-33
	 4E		CFM/SIDE	306	258	408	344	510	430	612	516	714	602	816	688	918	775
			THROW, FT.	21-25-36	19-24-33	24-28-42	22-27-37	27-33-48	25-30-43	28-34-51	27-33-48	33-37-54	28-34-51	33-39-58	33-37-54	36-43-61	33-42-57
	 3A1		CFM/SIDE	504	117	672	156	840	195	1008	234	1176	273	1344	312	1512	351
		THROW, FT.	24-28-42	12-15-19	27-33-48	13-16-22	30-37-54	15-18-25	33-45-58	16-19-27	34-45-63	18-21-28	37-48-66	18-22-30	42-51-70	19-24-33	
 2A		CFM/SIDE	562		750		937		1125		1312		1500		1682		
		THROW, FT.	24-28-42		27-33-48		30-37-54		33-42-58		34-45-63		37-48-66		42-51-70		
 2C	 2D	CFM/SIDE	890	234	1188	312	1485	390	1782	488	2079	546	2376	624	2873	702	
		THROW, FT.	28-36-49	18-22-30	33-42-49	21-25-34	37-48-64	24-28-39	42-51-69	25-33-43	45-54-75	27-33-46	48-58-79	28-36-49	51-61-85	33-37-52	
 1A		CFM/SIDE	1125		1500		1875		2250		2625		3000		3375		
		THROW, FT.	30-37-52		34-43-60		39-48-67		42-52-73		46-57-78		49-60-85		52-64-90		
21 x 18  2.625 SQ. FT.	RETURN FACTORS	—SP=2.2 TP NC + 5	785 14		1050 21		1310 27		1575 32		1840 36		2100 40		2360 43		
	 4B	 4C	CFM/SIDE	225	169	300	225	375	290	450	337	526	394	600	450	674	506
			THROW, FT.	16-19-27	13-16-22	19-22-33	15-18-25	22-25-36	16-21-28	24-27-40	18-22-30	25-28-42	19-24-33	27-33-45	21-25-36	28-33-48	22-27-37
	 3A1		CFM/SIDE	309	169	412	225	514	281	619	337	723	394	825	450	927	506
			THROW, FT.	21-25-36	13-16-22	24-28-42	15-18-25	27-33-48	16-21-28	28-34-51	18-22-30	33-37-54	19-24-33	33-39-58	21-25-36	36-43-61	22-27-37
	 3A2		CFM/SIDE	279	230	372	306	464	382	557	460	652	535	744	612	836	688
		THROW, FT.	21-25-36	15-18-25	24-28-42	16-21-28	27-33-48	18-24-33	28-34-51	19-25-34	33-37-54	21-27-37	33-39-58	22-28-39	36-43-61	24-33-43	
 2A		CFM/SIDE	398		525		655		787		920		1050		1180		
		THROW, FT.	22-27-37		25-33-42		28-36-46		30-38-54		33-42-58		36-45-63		37-48-66		
 2C	 2D	CFM/SIDE	450	338	600	450	750	560	900	675	1060	790	1200	900	1350	1010	
		THROW, FT.	22-27-37	19-24-33	25-33-42	22-27-37	28-36-46	25-30-43	30-38-54	27-33-48	33-42-58	28-34-51	36-45-63	33-37-54	37-48-66	33-42-57	
 1A		CFM/SIDE	787		1050		1310		1575		1840		2100		2360		
		THROW, FT.	29-35-51		35-40-58		38-46-68		42-51-70		45-54-75		48-58-80		51-61-85		
24 x 18  3.0 SQ. FT.	RETURN FACTORS	—SP=2.5 TP NC + 6	900 15		1200 22		1500 28		1800 33		2100 37		2400 40		2700 43		
	 4B	 4C	CFM/SIDE	281	169	375	225	468	281	563	337	656	394	750	450	844	506
			THROW, FT.	22-27-38	14-18-24	26-30-45	16-19-27	29-35-51	18-22-30	30-37-54	19-24-33	33-40-58	21-26-35	35-42-62	22-27-38	38-46-66	24-29-40
	 4E		CFM/SIDE	225	225	300	300	375	375	450	450	525	525	600	600	675	675
			THROW, FT.	21-26-35	21-26-35	24-29-40	24-29-40	27-32-46	27-32-46	29-35-51	29-35-51	30-37-54	30-37-54	33-40-58	33-40-58	35-45-61	35-45-61
	 3A1		CFM/SIDE	366	169	487	225	609	281	731	337	853	394	975	450	1098	506
		THROW, FT.	24-29-40	14-18-24	27-35-48	16-19-27	30-38-54	18-22-30	35-42-58	19-24-33	35-45-62	21-26-35	38-48-67	22-27-38	40-51-70	24-29-40	
 3A2		CFM/SIDE	300	300	400	400	500	500	600	600	700	700	800	800	900	900	
		THROW, FT.	25-31-43	20-23-32	28-34-50	23-27-40	32-40-58	27-31-43	34-41-61	29-32-47	40-45-65	31-34-50	40-47-70	32-40-54	43-52-74	34-40-58	
 2A		CFM/SIDE	450		600		750		900		1050		1200		1350		
		THROW, FT.	24-29-40		27-35-48		30-38-54		35-42-58		35-45-62		38-48-67		40-51-70		
 2C	 2D	CFM/SIDE	562	338	750	450	938	562	1125	675	1313	787	1500	900	1688	1012	
		THROW, FT.	26-30-45	21-26-35	29-35-51	24-29-40	32-40-58	27-32-46	35-45-62	29-35-51	37-48-67	30-37-54	40-51-70	33-40-58	45-54-75	35-45-61	
 1A		CFM/SIDE	900		1200		1500		1800		2100		2400		2700		
		THROW, FT.	30-38-53		35-45-61		40-51-69		45-54-74		48-58-80		51-62-85		54-66-91		

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST


































NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A
30 x 18  3.75 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 7	CFM NC	1125 15		1500 23		1875 29		2250 34		2625 38		3000 42		3375 45	
	 4B  4C	CFM/SIDE THROW, FT.	394	169	525	225	657	281	788	337	918	394	1050	450	1181	506
	 4E	CFM/SIDE THROW, FT.	281	281	375	375	469	469	563	563	657	657	750	750	845	845
	 3A1	CFM/SIDE THROW, FT.	478	169	637	225	797	281	956	337	1115	394	1275	450	1434	506
	 3A2	CFM/SIDE THROW, FT.	469	327	625	437	782	546	937	656	1093	766	1290	875	1406	894
	 2A  2B	CFM/SIDE THROW, FT.	562		750		937		1125		1312		1500		1687	
	 2C  2D  2E  2F	CFM/SIDE THROW, FT.	787	337	1050	450	1313	562	1575	675	1838	787	2100	900	2363	1012
	 1A  1B	CFM/SIDE THROW, FT.	1125		1500		1875		2250		2625		3000		3375	
36 x 18  4.5 SQ. FT.	RETURN FACTORS —SP=3.6 TP NC + 8	CFM NC	1350 16		1800 24		2250 30		2700 35		3150 39		3600 42		4050 45	
	 4B  4C	CFM/SIDE THROW, FT.	506	169	675	225	844	281	1013	337	1181	394	1350	450	1519	506
	 4E	CFM/SIDE THROW, FT.	339	339	452	452	565	565	678	678	791	791	904	904	1020	1020
	 3A1	CFM/SIDE THROW, FT.	591	169	787	225	984	281	1181	337	1378	394	1575	450	1772	506
	 3B	CFM/SIDE THROW, FT.	675	337	900	450	1125	562	1350	675	1575	787	1800	900	2025	1012
	 2A  2B	CFM/SIDE THROW, FT.	675		900		1125		1350		1575		1800		2025	
	 2C  2D  2E  2F	CFM/SIDE THROW, FT.	1010	337	1350	450	1688	562	2025	675	2363	787	2700	900	3038	1012
	 1A  1B	CFM/SIDE THROW, FT.	1350		1800		2250		2700		3150		3600		4050	
24 x 21  3.5 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 7	CFM NC	1050 15		1400 22		1750 28		2100 33		2450 37		2800 41		3150 44	
	 4B  4C	CFM/SIDE THROW, FT.	295	230	394	306	493	382	580	460	690	535	788	612	887	688
	 3A1	CFM/SIDE THROW, FT.	410	230	547	306	694	382	820	460	957	535	1094	612	1231	688
	 3A2	CFM/SIDE THROW, FT.	375	300	500	400	625	500	750	600	875	700	1000	800	1125	900
	 2A  2B	CFM/SIDE THROW, FT.	525		700		875		1050		1225		1400		1575	
	 2C  2D  2E  2F	CFM/SIDE THROW, FT.	591	469	788	612	986	764	1180	820	1380	1070	1576	1224	1774	1376
	 1A  1B	CFM/SIDE THROW, FT.	1050		1400		1750		2100		2450		2800		3150	

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A
30 x 21  4.375 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	1310 16		1750 23		2185 29		2625 34		3060 38		3500 41		3935 44	
	 4B  4C	CFM/SIDE THROW, FT.	425	230	568	306	710	382	852	460	995	535	1138	612	1278	688
	 4E	CFM/SIDE THROW, FT.	360	295	480	394	600	492	720	591	840	690	960	788	1080	887
	 3A1	CFM/SIDE THROW, FT.	540	230	722	306	901	382	1082	460	1262	535	1444	612	1623	688
	 3A2	CFM/SIDE THROW, FT.	468	422	625	562	782	701	937	844	1093	993	1250	1125	1406	1264
	 2A  2B	CFM/SIDE THROW, FT.	655		875		1092		1312		1530		1750		1968	
	 2C  2E	CFM/SIDE THROW, FT.	853	457	1138	612	1421	764	1705	920	1980	1070	2276	1224	2559	1376
	 1A  1B	CFM/SIDE THROW, FT.	1310		1750		2185		2625		3060		3500		3935	
36 x 21  5.25 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	1575 16		2100 24		2625 30		3150 34		3675 38		4200 42		4725 45	
	 4B  4C	CFM/SIDE THROW, FT.	558	230	744	306	930	382	1115	480	1306	535	1488	612	1674	688
	 4E	CFM/SIDE THROW, FT.	427	360	568	480	710	600	852	720	945	840	1135	960	1280	1080
	 3A1	CFM/SIDE THROW, FT.	672	230	897	306	1121	382	1345	460	1570	535	1794	612	2018	688
	 3A2	CFM/SIDE THROW, FT.	675	450	900	600	1125	750	1350	900	1575	1050	1800	1200	2025	1350
	 2A  2B	CFM/SIDE THROW, FT.	787		1050		1312		1575		1837		2100		2362	
	 2C  2E	CFM/SIDE THROW, FT.	1115	460	1488	612	1861	764	2230	920	2605	1070	2976	1224	3349	1376
	 1A  1B	CFM/SIDE THROW, FT.	1575		2100		2625		3150		3675		4200		4725	
30 x 24  5.0 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	1500 17		2000 25		2500 30		3000 35		3500 39		4000 43		4500 46	
	 4B  4C	CFM/SIDE THROW, FT.	450	300	600	400	750	500	900	600	1050	700	1200	800	1350	900
	 4E	CFM/SIDE THROW, FT.	375	375	500	500	625	625	750	750	875	875	1000	1000	1125	1125
	 3A1	CFM/SIDE THROW, FT.	600	300	800	400	1000	500	1200	600	1400	700	1600	800	1800	900
	 3A2	CFM/SIDE THROW, FT.	515	470	687	625	859	782	1031	937	1203	1093	1375	1250	1548	1406
	 2A  2B	CFM/SIDE THROW, FT.	750		1000		1250		1500		1750		2000		2250	
	 2C  2E	CFM/SIDE THROW, FT.	900	600	1200	800	1500	1000	1800	1200	2100	1400	2400	1600	2700	1800
	 1A  1B	CFM/SIDE THROW, FT.	1500		2000		2500		3000		3500		4000		4500	

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293			
			RETURN FACTORS	—SP=3.3 TP NC + 8	CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A
36 x 24  6.0 SQ. FT.	4B  4C	CFM/SIDE THROW, FT.	1800 18	2400 25	3000 31	3600 36	4200 40	4800 43	5400 46									
	4E	CFM/SIDE THROW, FT.	450 25-31-42	450 24-31-42	600 29-37-51	600 29-37-51	750 32-41-58	750 32-41-58	900 35-44-61	900 35-44-61	1050 37-48-66	1050 37-48-66	1200 41-51-71	1200 41-51-71	1350 42-54-75	1350 42-54-75		
	3A1	CFM/SIDE THROW, FT.	750 31-37-54	300 19-22-31	1000 37-42-61	400 22-25-37	1250 41-49-70	500 25-29-41	1500 44-54-75	600 27-31-44	1750 48-58-80	700 29-32-48	2000 51-61-85	800 31-37-51	2250 54-65-90	900 32-37-54		
	3A2	CFM/SIDE THROW, FT.	676 27-32-48	562 24-29-41	900 34-37-54	750 27-32-48	1125 34-42-61	937 31-37-54	1350 37-48-66	1125 32-39-58	1575 39-51-71	1312 35-42-61	1800 42-54-75	1500 37-44-66	2025 48-58-80	1687 41-49-70		
	2A 2B	CFM/SIDE THROW, FT.	900 32-41-56		1200 37-48-65		1500 42-54-73		1800 48-58-78		2100 51-61-85		2400 54-66-90		2700 58-70-97			
	2C  2E	CFM/SIDE THROW, FT.	1200 37-42-63	600 25-31-42	1600 41-51-71	800 29-37-51	2000 48-58-82	1000 32-41-58	2400 51-61-87	1200 35-44-61	2800 54-66-95	1400 37-48-66	3200 58-71-99	1600 41-51-71	3600 63-75-107	1800 42-54-75		
	1A 1B	CFM/SIDE THROW, FT.	1800 41-51-70		2400 48-58-80		3000 54-66-90		3600 58-70-99		4200 61-75-105		4800 66-80-114		5400 70-85-122			
	36 x 30  7.5 SQ. FT.	4B  4C	CFM/SIDE THROW, FT.	2250 19	3000 26	3750 32	4500 37	5250 41	6000 44	6750 47								
3A1		CFM/SIDE THROW, FT.	890 32-41-56	468 20-25-34	1187 37-48-65	625 24-29-39	1494 42-54-73	782 27-32-44	1781 48-58-78	937 29-37-49	2078 51-61-85	1093 31-37-53	2375 54-66-90	1250 32-41-56	2672 58-70-97	1406 37-42-59		
3A2		CFM/SIDE THROW, FT.	787 31-37-54	676 22-27-37	1060 37-42-61	900 25-31-42	1312 41-49-70	1125 29-34-49	1575 44-54-75	1350 31-37-54	1837 48-58-80	1575 32-39-58	2100 51-61-85	1800 37-42-61	2362 54-65-90	2025 37-48-65		
2A 2B		CFM/SIDE THROW, FT.	1125 34-42-59		1500 39-49-68		1875 44-56-76		2250 49-58-83		2625 53-65-88		3000 56-68-97		3375 58-73-102			
2C  2E		CFM/SIDE THROW, FT.	1312 37-42-63	938 29-37-51	1750 41-51-71	1250 34-41-58	2188 48-58-82	1562 39-48-66	2625 51-61-87	1875 41-51-70	3063 54-66-95	2187 44-54-75	3500 58-71-99	2500 49-58-80	3838 63-75-107	2812 53-63-86		
1A 1B		CFM/SIDE THROW, FT.	2250 49-60-82		3000 56-68-94		3750 64-78-106		4500 68-82-116		5250 72-88-124		6000 78-94-134		6750 82-100-144			

**Notes:**

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

**CFM** - cubic feet per minute

**TP** - total pressure - inches w.g.

**T** - throw in feet

**NC** - Noise Criteria (values) based on 10 dB room absorption, re 10<sup>-12</sup> watts.

**Neck Velocity** – feet per minute

**Performance Notes:**

1. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 25%.

2. Performance data as tabulated is for supply air conditions. Correction factors for return air application - see next page.

3. Correction factors for adjustable models - see next page.

4. Correction factors for round inlets - see next page.

5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

## Performance Data Corrections

Model Series AVPT, AVPT-OB, AVPR, AVPROB, JST

### CORRECTION FACTORS FOR RETURN INLET

If the unit is used as a return inlet, the performance data is obtained by applying the return corrections, as follows:

- Add the NC correction at the left side of the table to the NC value listed in the performance table.
- Multiply the listed SP factor at the left side of the table by the total pressure (TP) listed at the top of the table.

### CORRECTION FACTORS (ADJUSTABLE PATTERN CONTROLLERS) – TABLE 2

Refer to the performance data .  
Apply the corrections from Table 2 to the data for square, 4-way core styles, as follows:

- NC = listed + correction
- Total Pressure = listed x factor
- Horizontal Throw = listed
- Vertical Throw = listed x factor

Apply the throw factor to the 50 fpm terminal velocity throw only.

#### Example:

18" x 18", 1350 cfm, 20°F temperature difference heating, vertical projection,

- NC = 31 + 6 = 37
- TP = .13 x 2.1 = .273
- Throw = 36 x .9 = 32.4 feet @ 50 fpm terminal velocity.

### CORRECTION FACTORS WITH SQUARE TO ROUND INLET ADAPTOR – TABLE 3

- Add the NC correction factor from Table 3 and the NC value listed in the performance tables.
- Multiply the correction factor from Table 3 by the listed total pressure in the performance tables.
- Multiply the correction factor from Table 3 by the listed throws in the performance tables.

#### Example:

12" x 12" unit with 10" round adaptor handling 500 cfm supply air. (Page D18).

- NC = 23 + 7 = 30
- Total Pressure = .09 x 1.65 = 0.149
- Throw = 21 x 1.15 = 24.15 feet @ 50 fpm terminal velocity.

#### Example:

12" x 12" unit handling 600 cfm of return air.

- Return NC = 28 + 4 = 32.
- Return negative SP = 1.3 x (- .13) = - .169.

TABLE 2 Correction Factors Adjustable

NECK SIZE	NC (add)		TOTAL PRESSURE (multiply)		VERTICAL THROW (multiply)			
	H	V	H	V	COOLING, ΔT		HEATING, ΔT	
					20°F	0°F	20°F	40°F
6 x 6	2	6	1.2	1.5	1.3	1.1	0.8	0.6
9 x 9	2	6	1.4	2.1	1.5	1.2	0.9	0.6
12 x 12	2	6	1.4	2.1	1.6	1.3	1.0	0.6
15 x 15	2	6	1.4	2.1	1.7	1.3	1.0	0.6
18 x 18	2	6	1.4	2.1	1.7	1.3	0.9	0.6
21 x 21	2	6	1.4	2.1	1.7	1.3	0.8	0.5
24 x 24	2	6	1.6	2.2	1.5	1.1	0.7	0.3

TABLE 3 Correction Factors for SR Adaptors

SQUARE INLET	ROUND INLET	NC (add)	TP (multiply)	THROW (multiply)		
				150	100	50
6 x 6	5	7	1.65	1.10	1.10	1.15
9 x 9	6	17	3.50	1.15	1.15	1.20
9 x 9	8	4	1.40	1.10	1.10	1.10
12 x 12	8	17	3.50	1.15	1.15	1.20
12 x 12	10	7	1.65	1.10	1.10	1.15
15 x 15	10	17	3.50	1.15	1.15	1.20
15 x 15	12	9	1.90	1.10	1.10	1.15
15 x 15	14	3	1.25	1.05	1.05	1.10
18 x 18	12	17	3.50	1.15	1.15	1.20
18 x 18	14	10	2.00	1.10	1.10	1.15
18 x 18	16	5	1.45	1.10	1.10	1.10
21 x 21	14	17	3.70	1.15	1.15	1.20
21 x 21	16	11	2.25	1.10	1.10	1.15
21 x 21	18	6	1.60	1.10	1.10	1.10
21 x 21	20	3	1.20	1.05	1.05	1.10
24 x 24	16	17	3.50	1.15	1.15	1.20
24 x 24	18	12	2.35	1.10	1.10	1.15
24 x 24	20	7	1.65	1.10	1.10	1.15
24 x 24	22	4	1.33	1.05	1.05	1.10