1202 Series

SIZE	NOZZLE VELOCITY		500	1000	1500	2000	2500	3000	3500	4000
4	Nozzle Area 0.196 ft^2	CFM	10	20	30	40	50	60	70	80
		NC	<20	<20	<20	<20	20	20-25	25-30	30-35
		SP	.01	.05	.14	.25	.39	.56	.8	1.05
		Throw (ft.)	9 6 3	18 10 5	27 14 7 3	36 18 9 5	44 23 12 6	53 28 14 7	65 32 16 8	75 37 18 9
6	Nozzle Area 0.196 ft^2	CFM	25	50	80	100	120	150	170	190
		NC	<20	<20	<20	20	20	25-30	30	30-35
		SP	.02	.07	.18	.29	.44	.82	.93	1.2
		Throw (ft.)	19 10 5	30 16 8	50 25 13 8	65 31 17 9	80 37 20 10	100 45 23 12	110 55 28 14	125 50 30 15
8	Nozzle Area 0.196 ft^2	CFM	45	90	130	170	220	260	300	340
		NC	<20	<20	<20	20	20-25	25-30	25-30	30-35
		SP	.016	.06	.17	.27	.38	.64	.92	1.2
		Throw (ft.)	25 12 7	40 20 12	60 30 16 9	85 39 20 11	105 52 27 13	125 62 30 17	150 72 35 19	162 80 38 20
10	Nozzle Area 0.196 ft^2	CFM	85	170	250	330	420	500	580	660
		NC	<20	<20	<20	20	20-25	30	35	35-40
		SP	.014	.06	.14	.24	.44	.63	.92	1.2
		Throw (ft.)	30 15 8	55 30 14	90 42 22	112 55 29	148 72 36	162 84 42	190 100 48	225 112 55
12	Nozzle Area 0.196 ft^2	CFM	115	230	350	460	580	690	810	920
		NC	<20	<20	<20	20-25	25-30	30-35	35	40
		SP	.012	.055	.12	.22	.43	.6	.92	1.2
		Throw (ft.)	35 17 9	66 35 17	100 50 27	137 65 34	162 82 42	187 100 50	220 112 57	250 130 70
16	Nozzle Area 0.196 ft^2	CFM	225	450	680	900	1120	1350	1570	1800
		NC	<20	20	20-25	25	25-30	35-40	40	40-45
		SP	.012	.06	.12	.21	.41	.62	.9	1.2
		Throw (ft.)	45 25 12	90 47 24	138 66 36	175 95 47	225 112 55	250 137 65	275 160 80	350 175 95
18	Nozzle Area 0.196 ft^2	CFM	290	580	860	1150	1440	1720	2010	2300
		NC	<20	<20	20	25	30	35	35-40	40-45
		SP	.010	.06	.1	.21	.42	.6	.9	1.15
		Throw (ft.)	55 2713	112 55 27	152 98 40	200 110 52	250 125 67	300 155 78	350 175 90	400 200 110
20	Nozzle Area 0.196 ft^2	CFM	410	820	1230	1630	2040	2450	2850	3260
		NC	<20	<20	20	25-30	30-35	35-40	40-45	45
		SP	.01	.06	.12	.17	.41	.61	.9	1.2
		Throw (ft.)	70 38 20	150 75 39	220 112 56	275 150 75	350 175 90	400 212 112	425 250 125	450 275 150

ENGINEERING FOOTNOTES FOR SHOEMAKER DIFFUSERS & GRILLES:

SIZE: Nominal size or the duct opening / neck size.

EFFECTIVE AREA: The space between the blades actually utilized by the air.

VELOCITY: The actual velocity of the air through the blades measured with a velometer in at least 4 places.

FILTER VELOCITY: Some velocities higher than 500 FPM will decrease filter effectiveness and possibly blow off agglomerates.

Special Note: *The 920FG table gives the air flow for different filter grilles at 2 CFM per square inch of filter with allowance for the blockage caused by the grille.*

DUCT PT: The total pressure behind the diffuser in the duct forcing that air through the diffuser.

DUCT PS: The static pressure in the duct directly behind the grille or neck of the T-Bar grille. The static load on the fan chargeable against that grille. Velometer readings are taken between grille vanes giving actual velocity.

THROW: The throws noted in the tables are the distances from the diffuser to where the air stream velocity has dropped to not under 100/75/50 F.P.M.

NOISE CRITERIA:
NC "A" scale.
(1) Below NC25 extremely quiet.
(2) Below NC30 Quiet Office.
(3) Below NC35 Conference Rooms; normal voice 10-30 ft.
(4) Below NC40 Conference Rooms; 6-12 ft. normal voice.
(5) NC45 Conference Rooms; 3-6 ft. normal voice.

NOISE CRITERIA addition for RD series:
The NC values are based on a room absorption of 18 db, re 10-13 watts.

NOISE CRITERIA addition for OBR – Damper Throttling:
¼ Closed – 5
⅓ Closed – 10
½ Closed – 15