Useful Data

DISCHARGE, CUBIC FEET, FREE AIR PER MINUTE

Gauge Pressure before Orifice PSIG	DIAMETER OF ORIFICE in inches										
	1/64	1/32	1/16	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1
5	.062	248	.993	3.97	15.9	35.7	63.5	99.3	143	195	254
15	.105	420	1.68	6.72	26.9	60 5	108	168	242	329	430
20	123	491	1.96	7.86	31 4	70.7	126	196	283	385	503
25	.140	562	2.25	8.98	35.9	80 9	144	225	323	440	575
30	.158	.633	2.53	10 1	40.5	91.1	162	253	365	496	648
35	.176	703	2.81	11 3	45.0	101	180	281	405	551	720
40	.194	.774	3 10	12.4	49 6	112	198	310	446	607	793
45	.211	.845	3.38	13 5	54.1	122	216	338	487	662	865
50	.229	.916	3.66	14.7	58 6	132	235	366	528	718	938
60	264	1.06	4 23	16 9	67 6	152	271	423	609	828	1082
70	.300	1.20	4.79	19 2	76.7	173	307	479	690	939	1227
80	.335	1 34	5 36	21.4	85.7	193	343	536	771	1050	1371
90	.370	1.48	5.92	23.7	94 8	213	379	592	853	1161	1516
100	406	1.62	6.49	26.0	104	234	415	649	934	1272	1661
110	441	1.76	7.05	28 2	113	254	452	705	1016	1383	1806
120	.476	1.91	7.62	30 5	122	274	488	762	1097	1494	1951
125	.494	1 98	7.90	31 6	126	284	506	790	1138	1549	2023

FRICTION OF AIR IN HOSE

Size of hose, coupled each end (in.)	Gage pressure at line (Lb.)	Cu. ft. free air per min. passing through 50-ft. lengths of hose											
		20	30	40	50	60	70	80	90	100	110	120	130
		Loss of pressure (psi) in 50-ft. lengths of hose											
1/2	50	1 8	5 0	10 1	18 1								
	60	1 3	4 0	8 4	14 8	23 4							
	70	1 0	3 4	7 0	12 4	20 0	28 4						
	80	0 9	2 8	6 0	10 8	17 4	25 2	34 6					
	90	0 8	2 4	5 4	9 5	14 8	22 0	30 5	41 0				
	100	0 7	2 3	4 8	8 4	13 3	19 3	27 2	36 6				
	110	0 6	2 0	4 3	7 6	12 0	17 6	24 6	33 3	44 5			
3/4	50	0 4	0 8	1 5	2 4	3 5	4 4	6 5	8 5	11 4	14 2		
	60	0 3	0 6	1 2	1 9	2 8	3 8	5 2	6 8	8 6	11 2		
	70	0 2	0 5	0 9	1 5	2 3	3 2	4 2	5 5	7 0	8 8	11 0	
	80	0 2	0 5	0 8	1 3	1 9	2 8	3 6	4 7	5 8	7 2	8 8	10 6
	90	0 2	0 4	0 7	1 1	1 6	2 3	3 1	4 0	5 0	6 2	7 5	9 0
	100	0 2	0 4	0 6	1 0	1 4	2 0	2 7	3 5	4 4	5 4	6 6	7 9
	110	0 1	0 3	0 5	0 9	1 3	1 8	2 4	3 1	3 9	4 9	5 9	7 1
1	50	0 1	0 2	0 3	0 5	0 8	1 1	1 5	2 0	2 6	3 5	4 8	7 0
	60	1 1	0 2	0 3	0 4	0 6	0 8	1 2	1 5	2 0	2 6	3 3	4 2
	70	.	0 1	0 2	0 4	0 5	0 7	1 0	1 3	1 6	2 0	2 5	3 1
	80	.	0 1	0 2	0 3	0 5	0 7	0 8	1 1	1 4	1 7	2 0	2 4
	90		1 1	0 2	0 3	0 4	0 6	0 7	0 9	1 2	1 4	1 7	2 0
	100	.	1 1	0 2	0 2	0 4	0 5	0 6	0 8	1 0	1 2	1 5	1 8
	110	.	0 1	0 2	0 2	0 3	0 4	0 6	0 7	0 9	1 1	1 3	1 5

PIPE SIZE RECOMMENDED FOR TRANSMISSION OF COMPRESSED AIR TO 80-125 P.S.I.

Volume Of Air Transmitted	Length of Run (Ft.)				
	50-200	200-500	500-1000	1000-2500	2500-3000
(CFM)	Nominal Pipe Diameter (In.)				
30-60	1	1	1-1/4	1-1/2	1-1/2
60-100	1	1-1/4	2-1/4		
100-200	1-1/4	1-1/2	2	2-1/2	2-1/2
200-500	2	2-1/2	3	3-1/2	3-1/2
500-1000	2-1/2	3	3-1/2	4	4-1/2
1000-2000	2-1/2	4	4-1/2	5	5
2000-4000	3-1/2	5	6	8	8
4000-8000	6	8	8	10	10

SAND BLASTING NOZZLES

Nozzle Diameter	Gage Pressure			
	60	70	80	100
1/16	CFM 4	5	5 5	6.5
3/32	9	11	12	15
1/8	17	19	21	26
3/16	38	43	47	58
1/4	67	76	85	103
5/16	105	119	133	161
3/8	151	171	191	232
1/2	268	304	340	412