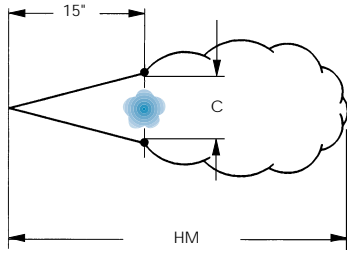


INTERNAL MIX SET-UPS — WIDE-ANGLE FULL CONE PRESSURE



These set-ups produce a full, rounded wide-angle spray pattern, using multiple orifices, with a spray angle of approximately 60 degrees.

Details are given in the illustration at the left. The maximum spray length is HM. The distance over which the spray remains well-defined is approximately 15 inches. Beyond this distance the spray becomes turbulent. The width of the spray at 15 inches is C.

The entries on the right-hand part of the table below show how HM and C vary as a function of selected values of liquid and air pressure (PL and PA) for the various set-ups.



LF = LIQUID FLOW RATE (gph)
 A = AIR FLOW RATE (scfm)
 PL = LIQUID PRESSURE (psi)
 PA = AIR PRESSURE (psi)

Materials: Nickel-plated brass (T8)
 303 stainless steel (B1)
 316 stainless steel (B3)
 PVC (D1)
 Lucite (E6)

SET-UP CODE	AIR PRESSURE (psi)																		
	8		10		12		14		20		30		40		60		PA	PL	C
	LF	A	LF	A	LF	A	LF	A	LF	A	LF	A	LF	A	LF	A			
SUL 1640	8	1.4	0.3	14	2.1	0.4	22	2.4	0.6	30	2.5	0.7	44	2.9	0.8	10	10	9"	5'
	10	1.1	0.4	16	1.9	0.5	26	2.0	0.7	34	2.2	0.8	48	2.7	0.9	20	20	9 1/2"	6'
	12	0.7	0.5	18	1.7	0.6	30	1.6	0.8	38	1.9	0.9	55	2.3	1.2	34	30	10"	7'
	14	0.4	0.6	20	1.4	0.6	34	1.1	1.1	42	1.5	1.1	60	1.9	1.4	42	40	10 1/2"	9'
	-	-	-	22	1.2	0.7	36	0.9	1.1	46	1.1	1.3	65	1.5	1.6	60	60	12"	13'
Ln XMW 5001	-	-	-	24	0.9	0.8	38	0.7	1.2	48	0.9	1.4	70	1.1	1.8	-	-	-	-
An XMW 4010	-	-	-	26	0.5	0.9	40	0.4	1.2	50	0.7	1.5	75	0.6	2.0	-	-	-	-
SUM 2220	12	1.8	1.8	22	3.3	2.3	30	5.1	2.5	38	6.4	2.8	54	8.8	3.4	12	10	12 1/2"	6'
	14	0.5	2.2	24	2.2	2.7	32	4.2	2.8	42	4.7	3.4	56	8.1	3.7	24	20	13"	8'
	-	-	-	26	1.2	3.1	34	3.3	3.2	44	3.9	3.7	58	7.4	4.0	34	30	13"	10 1/2'
	-	-	-	-	-	-	36	2.5	3.5	46	3.1	4.1	60	6.8	4.3	46	40	13 1/2"	13 1/2'
	-	-	-	-	-	-	38	1.6	3.8	48	2.3	4.4	65	5.1	5.1	60	60	14 1/2"	19 1/2'
Ln XMW 5003	-	-	-	-	-	40	0.7	4.3	50	1.4	4.8	70	3.5	6.0	-	-	-	-	
An XMW 4011	-	-	-	-	-	-	-	-	52	0.6	5.3	75	1.8	6.5	-	-	-	-	
SUL 2330	18	9.3	3.0	30	13.5	4.2	44	15.4	5.5	60	15.6	7.1	80	21.3	8.6	28	10	13"	18'
	22	7.6	3.5	34	12.0	4.7	48	13.9	5.8	70	12.5	8.3	85	19.4	9.2	42	20	13 1/2"	21'
	26	6.1	4.1	38	10.4	5.2	55	11.2	6.8	80	9.3	9.5	90	17.8	9.8	65	30	14 1/2"	27'
	28	5.3	4.3	42	9.0	5.6	65	7.9	8.1	85	7.8	10.0	95	16.6	10.3	85	40	15"	30'
	30	4.3	4.7	46	7.4	6.2	70	6.2	8.7	90	6.2	10.7	100	15.2	11.0	90	60	16"	34'
Ln XMW 5003	32	3.6	5.1	50	5.9	6.7	75	4.6	9.3	95	4.8	11.3	-	-	-	-	-	-	
An XMW 4013	34	3.1	5.3	60	2.5	8.0	80	3.4	9.9	100	3.7	11.9	-	-	-	-	-	-	
SUM 2460	10	6.2	1.1	20	9.1	1.6	30	11.1	2.1	40	12.4	2.5	56	16.1	2.7	12	10	14"	7'
	12	3.5	1.5	22	7.0	2.0	32	9.2	2.5	42	10.6	2.9	58	14.7	3.1	22	20	14 1/2"	10 1/2'
	14	1.9	2.0	24	5.2	2.4	34	7.3	2.8	44	8.8	3.3	60	13.7	3.5	34	30	14 1/2"	13 1/2'
	-	-	-	26	3.3	2.8	36	5.5	3.2	46	7.1	3.7	65	9.7	4.4	46	40	15"	16 1/2'
	-	-	-	-	-	-	38	3.5	3.6	48	5.4	4.1	70	6.4	5.4	65	60	15 1/2"	22 1/2'
Ln XMW 5004	-	-	-	-	-	40	2.4	4.0	50	3.6	4.5	75	4.0	6.3	-	-	-	-	
An XMW 4011	-	-	-	-	-	-	-	-	52	2.2	4.9	80	2.4	6.5	-	-	-	-	
SUM 2860	16	3.3	1.4	28	4.6	1.9	42	5.3	2.7	55	5.7	3.3	80	7.1	4.5	22	10	9"	9'
	18	2.6	1.6	32	3.4	2.3	46	4.1	3.0	60	4.2	3.7	85	5.8	4.9	40	20	9 1/2"	15'
	20	2.1	1.8	36	2.4	2.5	48	3.5	3.1	65	3.2	4.1	90	4.7	5.3	50	30	9 1/2"	18'
	22	1.6	1.9	40	1.8	2.9	50	3.0	3.3	70	2.3	4.4	95	3.8	5.7	70	40	10"	24'
	24	1.3	2.1	42	1.4	3.0	55	2.1	3.6	75	1.7	4.8	100	3.0	6.0	90	60	11"	31'
Ln XMW 5004	26	1.1	2.2	44	1.2	3.1	60	1.5	4.0	80	1.3	5.2	-	-	-	-	-	-	
An XMW 4012	28	0.8	2.4	46	1.0	3.3	65	1.0	4.4	85	1.1	5.6	-	-	-	-	-	-	
SUQ 3140	24	6.8	5.6	38	10.8	7.5	48	16.6	8.9	60	18.6	10.4	85	29.3	13.8	28	10	18"	18'
	26	5.3	6.0	42	7.7	8.4	52	12.6	9.7	65	13.7	11.4	90	24.7	14.8	46	20	18 1/2"	21'
	28	4.1	6.4	44	6.3	8.8	56	9.3	10.5	70	10.0	12.4	95	20.8	15.9	60	30	20"	24'
	30	3.1	6.9	46	5.1	9.2	60	6.7	11.4	75	7.4	13.5	100	17.6	16.8	75	40	21"	26'
	32	2.1	7.3	48	4.1	9.6	62	5.7	11.8	80	5.5	14.5	-	-	-	90	60	23"	32'
Ln XMW 5005	-	-	-	50	3.1	10.0	65	4.5	12.4	85	4.0	15.5	-	-	-	-	-	-	
An XMW 4014	-	-	-	52	2.5	10.4	70	2.7	13.4	90	2.5	16.6	-	-	-	-	-	-	

AIR-ATOMIZING NOZZLES

