

Concrete Placing System Output Rates



Pipe Size ID (inches)	PIPE DIAMETER										
	2	2.5	3	3.5	4	4.5	5	6	7	8	10
Area Square inches	3.14	4.91	7.07	9.62	12.56	15.90	19.63	28.26	38.47	50.24	78.50
Square feet	0.02	0.03	0.05	0.07	0.09	0.11	0.14	0.20	0.27	0.35	0.55
Vol/100 feet gallons	16.31	25.49	36.70	49.96	65.25	82.58	101.95	146.81	199.83	261.00	407.82
cu feet	2.18	3.41	4.91	6.68	8.72	11.04	13.63	19.63	26.71	34.89	54.51
cu yds	0.08	0.13	0.18	0.25	0.32	0.41	0.50	0.73	0.99	1.29	2.02
Weight (in lbs.) of Concrete per 10' section @150 lb/ft ³	32.71	51.11	73.59	100.17	130.83	165.59	204.43	294.38	400.68	523.33	817.71
Weight (in lbs.) of Water per 10' section @ 62.4 lb/ft ³	13.61	21.26	30.62	41.67	54.43	68.88	85.04	122.46	166.68	217.71	340.17
Pipe length per Cu. Yd. of Concrete	1238	792	550	404	310	245	198	138	101	77	50

Pipe Size ID (Inches)	2	2.5	3	3.5	4	4.5	5	6	7	8	10
Feet/Second Velocity	CUBIC YARDS PER HOUR - VARIOUS VELOCITIES										
1	3	4	7	9	12	15	19	27	36	47	73
2	5	8	13	19	24	29	37	53	72	93	147
3	8	12	20	28	36	44	56	80	108	140	220
4	11	16	27	37	48	59	75	107	144	187	293
5	13	20	33	47	60	73	93	133	180	233	367
6	16	24	40	56	72	88	112	160	216	280	440
7	19	28	47	65	84	103	131	187	252	327	513
8	21	32	53	75	96	117	149	213	288	373	587
9	24	36	60	84	108	132	168	240	324	420	660
10	27	40	67	93	120	147	187	267	360	467	733
11	29	44	73	103	132	161	205	293	396	513	807
12	32	48	80	112	144	176	224	320	432	560	880