



Pipe Size & Flow Cheatsheet

EDDY PUMP MODELS		Performance HDPE Pipe Size Options (Diameter)		SILT, Sewage, Clay etc. 8'/sec. (2.4 m/s) Minimum Pipeline velocity (Non-Settling Slurrys)									
				HDPE DR-17 (130 psi) Estimated Production Yards ³ /Hour (m ³ /hr)					HDPE DR-11 (200 psi) Estimated Production Yards ³ /Hour (m ³ /hr)				
				Flow Rate gpm (m ³ /hr)	20% Solids by Volume	30% Solids by Volume	40% Solids by Volume	50% Solids by Volume	Flow Rate gpm (m ³ /hr)	20% Solids by Volume	30% Solids by Volume	40% Solids by Volume	50% Solids by Volume
HD 1K	1.25"	35 (8)	2 (1.5)	3 (2)	4 (3)	5 (4)	35 (8)	2 (1.5)	3 (2)	4 (3)	5 (4)		
	1.5"	46 (10)	3 (2)	4 (3)	6 (4)	7 (5)	46 (10)	3 (2)	4 (3)	6 (4)	7 (5)		
HD 2K	2.0"	85 (19)	5 (4)	8 (6)	10 (7.5)	12.5 (9.5)	72 (16)	4 (3)	6 (4)	9 (7)	11 (8)		
	3.0"	184 (42)	11 (8.5)	16.5 (12.5)	22 (17)	27.5 (21)	160 (36)	10 (8)	14 (11)	19 (14)	24 (18)		
HD 3K	3.0"	184 (42)	11 (8.5)	16.5 (12.5)	22 (17)	27.5 (21)	160 (36)	10 (8)	14 (11)	19 (14)	24 (18)		
	4.0"	304 (69)	18 (14)	27 (21)	36 (28)	45 (34)	260 (59)	15 (11)	23 (17)	31 (23)	39 (30)		
HD 4K	4.0"	304 (69)	18 (14)	27 (21)	36 (28)	45 (34)	260 (59)	15 (11)	23 (17)	31 (23)	39 (30)		
	6.0"	658 (149)	39 (30)	59 (45)	78 (60)	98 (75)	600 (135)	36 (27)	54 (41)	71 (54)	89 (68)		
HD 5K	4.0"	304 (69)	18 (14)	27 (21)	36 (28)	45 (34)	260 (59)	15 (11)	23 (17)	31 (23)	39 (30)		
	5.0"(Hose)	490 (111)	29 (22)	44 (34)	58 (44)	73 (56)	490 (111)	29 (22)	44 (34)	58 (44)	73 (56)		
	6.0"	658 (149)	39 (30)	59 (45)	78 (60)	98 (75)	600 (135)	36 (27)	54 (41)	71 (54)	89 (68)		
HD 6K	6.0"	658 (149)	39 (30)	59 (45)	78 (60)	98 (75)	600 (135)	36 (27)	54 (41)	71 (54)	89 (68)		
	8.0"	1116 (253)	66 (50)	99 (76)	132 (101)	166 (127)	950 (214)	56 (42)	85 (65)	112 (85)	141 (107)		
HD 8K	8.0"	1116 (253)	66 (50)	99 (76)	132 (101)	166 (127)	950 (214)	56 (42)	85 (65)	112 (85)	141 (107)		
	10.0"	1734 (394)	103 (79)	154 (118)	206 (157)	258 (197)	1500 (338)	89 (68)	134 (102)	178 (135)	223 (170)		
HD 10K	10.0"	1734 (394)	103 (79)	154 (118)	206 (157)	258 (197)	1500 (338)	89 (68)	134 (102)	178 (135)	223 (170)		
	12.0"	2439 (554)	145 (111)	217 (166)	289 (221)	362 (277)	2100 (474)	125 (95)	187 (142)	250 (190)	312 (237)		
HD 12K	12.0"	2439 (554)	145 (111)	217 (166)	289 (221)	362 (277)	2100 (474)	125 (95)	187 (142)	250 (190)	312 (237)		
	16.0"	3838 (872)	228 (174)	342 (261)	456 (349)	570 (436)	3300 (745)	196 (149)	288 (219)	392 (298)	490 (372)		
	18.0"	4861 (1104)	289 (221)	433 (331)	578 (442)	722 (552)	4200 (948)	250 (190)	374 (284)	500 (380)	625 (475)		



Pipe Size & Flow Cheatsheet

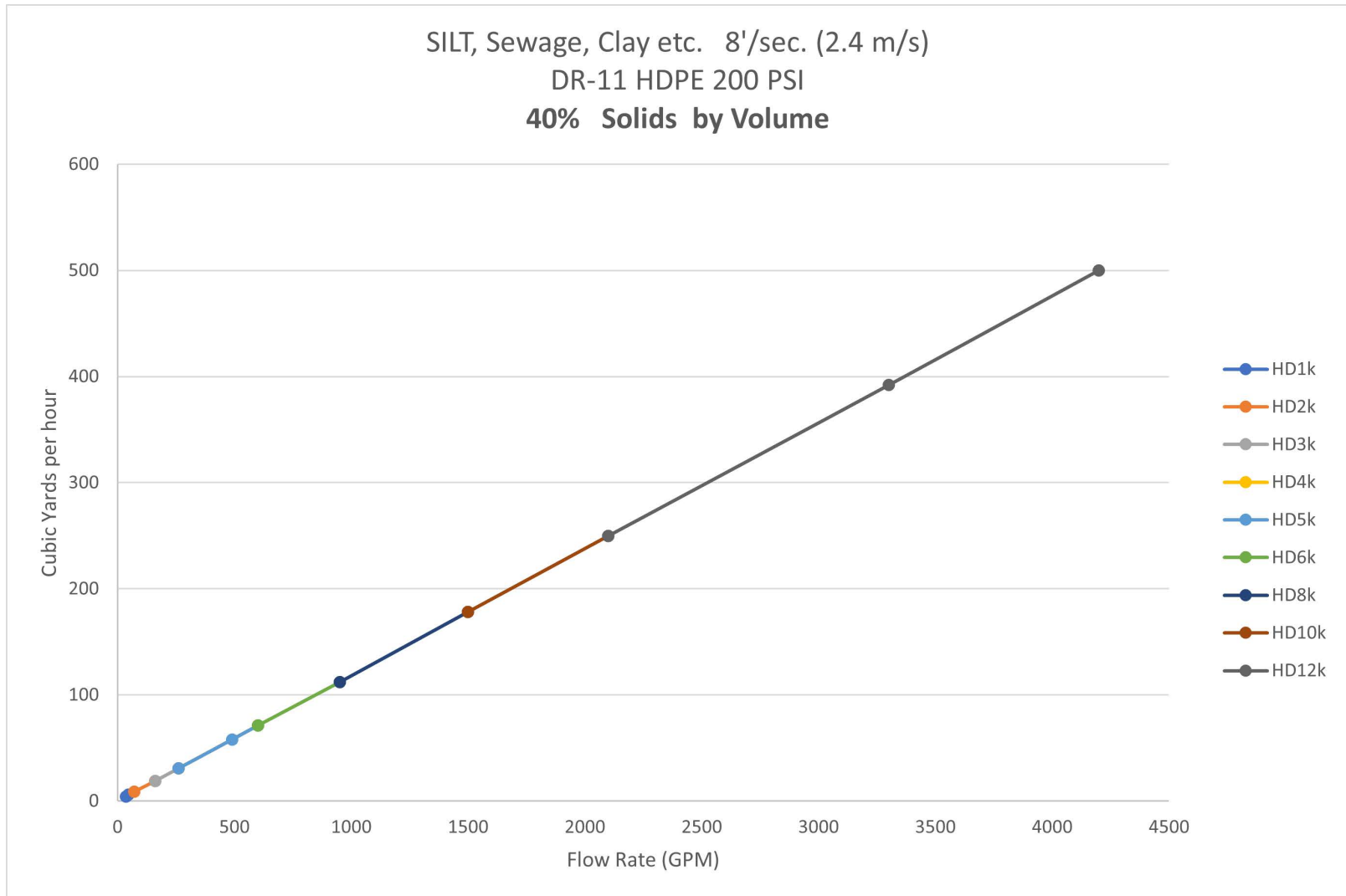
EDDY PUMP MODELS	Performance HDPE Pipe Size Options (Diameter)	SAND etc. (Typical Beach and Harbor sand). 15'/sec. (4.5 m/s) Minimum Pipeline velocity (Settling Slurries)										PIPE LINE PLUGGED SOLID
		Flow Rate gpm (m³/hr)	HDPE DR-17 (130 psi) Estimated Production Yards³/Hour (m³/hr)				HDPE DR-11 (200 psi) Estimated Production Yards³/Hour (m³/hr)				65% Solids by Volume 84% Solids by Weight 2.1 SG	
			20% Solids by Volume 40% Solids by Weight 1.3 SG	30% Solids by Volume 50% Solids by Weight 1.5 SG	40% Solids by Volume 65% Solids by Weight 1.7 SG	50% Solids by Volume 75% Solids by Weight 1.8 SG	Flow Rate gpm (m³/hr)	20% Solids by Volume 40% Solids by Weight 1.3 SG	30% Solids by Volume 50% Solids by Weight 1.5 SG	40% Solids by Volume 65% Solids by Weight 1.7 SG		
HD 1K	1.25"	65 (15)	4 (3)	6 (4)	8 (6)	10 (8)	65 (15)	4 (3)	6 (4)	8 (6)	10 (8)	65% Solids by Volume 84% Solids by Weight 2.1 SG
	1.5"	86 (19)	5 (4)	8 (6)	10 (8)	13 (10)	86 (19)	5 (4)	8 (6)	10 (8)	13 (10)	
HD 2K	2.0"	158 (36)	9 (7)	14 (11)	19 (14)	24 (18)	135 (31)	8 (6)	12 (9)	16 (12)	20 (15)	65% Solids by Volume 84% Solids by Weight 2.1 SG
	3.0"	345 (78)	20 (15)	31 (23)	41 (31)	51 (39)	300 (68)	18 (14)	27 (20)	36 (27)	44 (33)	
HD 3K	3.0"	345 (78)	20 (15)	31 (23)	41 (31)	51 (39)	300 (68)	18 (14)	27 (20)	36 (27)	44 (33)	65% Solids by Volume 84% Solids by Weight 2.1 SG
	4.0"	569 (129)	34 (26)	51 (39)	68 (52)	85 (65)	500 (113)	29 (22)	44 (33)	60 (46)	74 (56)	
HD 4K	4.0"	569 (129)	34 (26)	51 (39)	68 (52)	85 (65)	500 (113)	29 (22)	44 (33)	60 (46)	74 (56)	65% Solids by Volume 84% Solids by Weight 2.1 SG
	6.0"	1234 (280)	73 (56)	110 (84)	146 (112)	183 (140)	1050 (237)	62 (47)	93 (70)	125 (95)	156 (118)	
HD 5K	4.0"	569 (129)	34 (26)	51 (39)	68 (52)	85 (65)	500 (113)	29 (22)	44 (33)	60 (46)	74 (56)	65% Solids by Volume 84% Solids by Weight 2.1 SG
	5.0"(Hose)	918 (208)	54 (41)	82 (63)	109 (83)	136 (104)	918 (208)	54 (41)	82 (63)	109 (83)	136 (104)	
	6.0"	1234 (280)	73 (56)	110 (84)	146 (112)	183 (140)	1050 (237)	62 (47)	93 (70)	125 (95)	156 (118)	
HD 6K	6.0"	1234 (280)	73 (56)	110 (84)	146 (112)	183 (140)	1050 (237)	62 (47)	93 (70)	125 (95)	156 (118)	65% Solids by Volume 84% Solids by Weight 2.1 SG
	8.0"	2093 (475)	124 (95)	187 (143)	249 (190)	311 (238)	1800 (406)	107 (81)	160 (122)	214 (162)	267 (203)	
HD 8K	8.0"	2093 (475)	124 (95)	187 (143)	249 (190)	311 (238)	1800 (406)	107 (81)	160 (122)	214 (162)	267 (203)	65% Solids by Volume 84% Solids by Weight 2.1 SG
	10.0"	3252 (738)	193 (148)	290 (222)	386 (295)	483 (369)	2800 (632)	166 (126)	250 (190)	330 (250)	416 (316)	
HD 10K	10.0"	3252 (738)	193 (148)	290 (222)	386 (295)	483 (369)	2800 (632)	166 (126)	250 (190)	330 (250)	416 (316)	65% Solids by Volume 84% Solids by Weight 2.1 SG
	12.0"	4573 (1038)	272 (208)	407 (311)	543 (415)	679 (519)	3900 (880)	232 (176)	347 (264)	460 (350)	579 (440)	
HD 12K	12.0"	4573 (1038)	272 (208)	407 (311)	543 (415)	679 (519)	3900 (880)	232 (176)	347 (264)	460 (350)	579 (440)	65% Solids by Volume 84% Solids by Weight 2.1 SG
	16.0"	7200 (1635)	428 (327)	641 (490)	855 (654)	1069 (817)	6200 (1400)	368 (280)	552 (420)	735 (558)	920 (700)	
	18.0"	9115 (2070)	541 (414)	812 (621)	1083 (828)	1354 (1035)	7800 (1750)	483 (352)	695 (528)	925 (703)	1158 (880)	

Consider shaded larger pipe sizes for high viscosity slurries at slower line velocities $L=(3.78) \times (\text{gal})$ $m=(.76) \times (\text{yds})$

Not Recommended (HIGH HP unless use small rotor)



Pipe Size & Flow Cheatsheet





Pipe Size & Flow Cheatsheet

