

BATCH POLYMER SYSTEM

FOR FLOCCULATION APPLICATIONS



An advanced batch polymer blending and injection system that efficiently conditions sludge for dewatering.

Park Process's PolyCat™ batch type polymer blending and injection system is designed for the preparation of liquid polymer to aid in the flocculation of sludge in the dewatering process.

The PolyCat™ is a cost-effective alternative to inline polymer mixing systems, typically using less polymer per pound of sludge treated. The batch tank method allows for the time necessary to uncoil the long chain polymer molecules, making them more effective in reacting with sludge solid particles.

The PolyCat™ system is used in conjunction with standard solid separation devices, dewatering boxes, centrifuges, belt presses, filter presses, and other equipment requiring flocculation to enable dewatering.

Features:

- Heavy duty 1.9 SG polyethylene polymer tank
- Gear driven agitator mounted on MixTank
- TEFC 110V/1 ph/60 Hz. drive motor
- 175 RPM Gearbox output
- Stainless steel mixer shaft and mixer blades
- Wobble-Stator progressive cavity dilute polymer injection pump
- TEFC DC motor drive-constant torque up and down the speed range
- DC controller in NEMA-4 enclosure for pump speed control
- On/Off switch for agitator motor located in NEMA-4 box
- Static mixer for polymer/sludge interface with throttle valve
- All components mounted on a carbon steel skid with fork pockets, piped and wired

Applications Include:

- · Bio-solids Flocculation
- · Alum Sludge Flocculation
- Grease Trap Waste Flocculation
- · Septic Tank Waste Flocculation







Amount of Sludge to Treat	Amount of Dilute Polymer(0.5%) Required to Treat Sludge at Varying % Solids in Gallons Available Tank Sizes for One Batch Treatment in Parenthesis				
Gallons	0.50%	1.00%	1.50%	2.00%	2.50%
1,000	10 (25)	20 (25)	30 (50)	40 (50)	50 (75)
2,000	20 (25)	40 (50)	60 (75)	80 (120)	100 (125)
4,000	40 (50)	80 (120)	120 (120)	160 (300)	200 (300)
6,000	60 (75)	120 (120)	180 (300)	240 (300)	300 (300)
8,000	80 (120)	160 (175)	240 (300)	320 (500)	400 (500)
10,000	100 (120)	200 (300)	300 (300)	400 (500)	500 (500)
12,000	120 (120)	240 (300)	360 (500)	480 (500)	600 (800)
14,000	140 (175)	280 (300)	420 (500)	560 (800)	700 (800)
16,000	160 (175)	320 (500)	480 (500)	640 (800)	800 (800)
18,000	180 (300)	360 (500)	540 (800)	720 (800)	900 (1,100)
20,000	200 (300)	400 (500)	600 (800)	800 (800)	1,000 (1,100)
22,000	220 (300)	440 (500)	660 (800)	880 (1,100)	1,100 (1,100)
24,000	240 (300)	480 (500)	720 (800)	960 (1,100)	1,200 (1,200)
26,000	260 (300)	520 (800)	780 (800)	1,040 (1,100)	1,300 (1,500)
28,000	280 (300)	560 (800)	840 (1,100)	1,120 (1,200)	1,400 (1,500)
30,000	300 (300)	600 (800)	900 (1,100)	1,200 (1,200)	1,500 (2,100)
32,000	320 (500)	640 (800)	960 (1,100)	1,280 (1,500)	1,600 (2,100)
34,000	340 (500)	680 (800)	1,020 (1,100)	1,360 (1,500)	1,700 (2,100)
36,000	360 (500)	720 (800)	1,080 (1,100)	1,440 (1,500)	1,800 (2,100)
38,000	380 (500)	760 (800)	1,140 (1,200)	1,520 (1,550)	1,900 (2,100)
40,000	400 (500)	800 (800)	1,200 (1,200)	1,600 (2,100)	2,000 (2,100)



Tanks and Options:

- 500 Gal. with 1 HP agitator
- 300 Gal. with ½ HP agitator
- Separate skids for mix tank and pump/controls
- 230/460V 3-phase motor and controls in lieu of 110V/AC
- 2 tank system





