



The FlocXpress Pipe Flocculator is a *plug-flow reactor* type coagulation, flocculation system, consisting of a long serpentine pipe of a specific length and diameter. The term" plug-flow" refers to the fact that retention time and mixing energy is constant in any given cross section of the pipe. As such, all particles are subjected to the same amount of mixing energy for the same amount of time. This results in a highly uniform floc with excellent separation characteristics.



- 1 Raw water
- <u>2</u> After dosing coagulant and reaction through static mixer
- 3 After pH control, dosing polymer and reaction through static mixer



FlocXpress are delivered standard with fitting ports for chemical dosing-Coagulant (PAC/FeCl₃), Alkali/Acid, Polymer, and Sampling drain valve, pH sensor probe and coagulation, flocculation checking ports. Mixing energy and reaction energy in the Static mixer unit and in the pipe are result turbulence. For this reason, a flocculants is dosed after the coagulant and pH is completed. Floc growth takes place in the pipe after the third static mixer units. In this way a uniform,

ideal floc is formed for separation in the DAF (left picture) or sedimentation tank by gravity.

Benefits

- Both Coagulation, pH adjusted and Flocculation in one unit
- Requires much less space than conventional reaction tanks
- Energy efficiency; No additional energy input required
- Little or no maintenance; No moving parts



Dimension and Technical data

Model	Flow Rate, m³/h			Dimensions(cm)				Weight / Kgs	
	MIN.	AVG.	MAX.	L	W	Н	Flange	Empty	Full
FX-10	7.0	10.0	12.0	270	51	92	2"	100	160
FX-30	24.0	30.0	36.0	445	75	110	3"	220	475
FX-50	40.0	50.0	60.0	445	85	130	4"	578	1034
FX-100	85.0	100.0	120.0	470	115	165	6"	810	1610
FX-150	125.0	150.0	170.0	483	115	196	8"	1040	2680
FX-200	175.0	200.0	220.0	550	135	196	8"	1290	2720
FX-250	225.0	250.0	265.0	555	135	210	10"	1775	3750
FX-300	270.0	300.0	350.0	555	143	210	10"	1840	4360
FX-400	360.0	400.0	420.0	555	143	243	12"	2480	5680

Ecologix reserves the right to alter technical data and/or to modify the product without previous notice.

Custom size and flow rate available
Pipe material: uPVC, HDPE and Stainless steel pipe available as option