CromaFlow Inc. Model CF 100

SPECIFICATIONS

The Model CF 100 treatment system is constructed with two (2) fiberglass tanks, noncorrosive internal parts, stainless steel trash screening, floating decanter, PVC schedule 80 and 40 piping, four (4) submersible aeration pumps with venturi system, denite air control valve, two (2) submersible transfer pump, one (1) RAS pump, two (2) submersible discharge pumps sized to meet total dynamic head requirements of the project, and HMI/PLC controls with remote monitoring/operations ready controls.

	CROMAFLOW CF 100	***U.S.A Customary Units***	*Metric*
1	Tank dimensions	42'10"L x 7'4"W x 8'3"H	13 m x 2.23 m x 2.5 m
2	Rated treatment capacity	10,000 gallons/day	37.85 m^3/day
3	Total tank volume	9,200 gallons	34.83 m^3
4	Aeration volume	7,000 gallons	26.5 m^3
5	Clarifier volume	2,186 gallons	8.3 m^3
6	Discharge volume	1,000 gallons	3.8 m^3
7	Discharge cycles/day	10 cycles/day	10 cycles/day
8	Surge capacity	4,000 gallons	14.14 m^3
9	Aeration capability (with standard pumps)	87.5 lbs. O_2/day	39.7 kg O_2/day
10	Maximum organic loading	27 lbs. BOD_5/day	12.3 kg BOD_5/day
11	Design influent BOD_5	340 mg/L	340 mg/L
12	Design influent TSS	340 mg/L	340 mg/L
13	Design influent nitrogen (Ammonia)	40 mg/L	40 mg/L
14	Design influent TKN	55 mg/L	55 mg/L
15	Effluent CBOD (Carbonaceous)	$\leq$25 mg/L	$\leq$25 mg/L
16	Effluent TSS	$\leq$25mg/L	$\leq$25 mg/L
17	Effluent TN	$\leq$10 mg/L (Running denitrification)	$\leq$10 mg/L (Running denitrification)
18	Effluent TKN	$\leq$20 mg/L (with nitrification)	$\leq$20 mg/L(with nitrification)
15	Standard aerator efficiency (SAE)	0.81 lbs. O_2/hp-hr.	0.37 kg O_2/hp-hr.
16	Oxygen transfer rate (OTR)	0.81 lbs. O_2/hr	0.37 kg O_2/hr
17	Minimum design dissolved oxygen (DURING AERATION AT $\leq$DESIGN MLVSS)	2.0 mg/L	2.0 mg/L
18	Retention time	12-50 hours	12-50 hours

Power: Designed per site requirements. Electrical is designed project specific 50 or 60 Hz.

Control panel: HMI/PLC controls with NEMA 4x enclosure standard, NEMA 3-13 available as an option.

Alarm System: Red, yellow, green stack light with remote monitoring/operations to the internet via a dedicated IP address.

Tank construction materials: molded chopped strand fiberglass reinforced using isophthalic polyester resin and finished with marine grade gel coat.

Aeration equipment: Differential pressure injectors (venturi system) in combination with submersible pumps.