CromaFlow Inc. Model CF 5

SPECIFICATIONS

The Model CF 5 treatment system is constructed with one (1) fiberglass tank, noncorrosive internal parts, two (2) manway access openings, stainless steel trash screening, PVC schedule 40 piping, one (1) submersible aeration pumps with venturi system, one (1) submersible discharge pump sized to meet total dynamic head requirements of the project, and Mechanical or HMI/PLC controls with remote monitoring/operations ready controls.

	$CROMAFLOW\ CF\ 5$	U.S.A Customary Units	Metric
1	Tank dimensions	7'11"L x 5'7"W x 5'7"H	2.4 m x 1.7 m x 1.7 m
2	Rated treatment capacity	500 gallons/day	1.89 m³/day
3	Total tank volume	1,00 gallons	$3.8 \; m^3$
4	Aeration volume	718.5 gallons	$2.72 \; { m m}^{3}$
5	Clarifier volume	281.5 gallons	$1.07 \; \mathrm{m}^3$
6	Discharge volume	84 gallons	317.97 liters
7	Discharge cycles/day	6 cycles/day	6 cycles/day
8	Surge capacity	290 gallons	$1.1 \; \mathrm{m}^{3}$
9	Aeration capability (with standard pumps)	$4.5 ext{ lbs. } O_2/day$	$2.04~{ m kg}~{ m O_2/day}$
10	Maximum organic loading	2.3 lbs. BOD ₅ /day	1.04 kg BOD₅/day
11	${\bf Design\ influent\ BOD_5}$	$250~\mathrm{mg/L}$	$250~\mathrm{mg/L}$
12	Design influent TSS	$300~\mathrm{mg/L}$	$300~\mathrm{mg/L}$
13	Design influent nitrogen (Ammonia)	$40~{ m mg/L}$	$40~\mathrm{mg/L}$
14	Design influent TKN	$55~\mathrm{mg/L}$	$55~\mathrm{mg/L}$
15	Effluent CBOD (Carbonaceous)	<u>≤</u> 25 mg/L	<u>≤</u> 25 mg/L
16	Effluent TSS	$\leq 25 \mathrm{mg/L}$	<u>≤</u> 25 mg/L
17	Effluent TN	≤10 mg/L (Running	≤10 mg/L (Running
		denitrification)	denitrification)
18	Effluent TKN	≤20 mg/L (with nitrification)	≤20 mg/L(with nitrification)
15	Standard aerator efficiency (SAE)	$0.81~\mathrm{lbs.}~\mathrm{O_2/hp\text{-}hr.}$	$0.37~{ m kg~O_2/hp-hr}.$
16	Oxygen transfer rate (OTR)	$0.40~\mathrm{lbs.}~\mathrm{O_2/hr}$	$0.37~{ m kg~O_2/hr}$
17	Minimum design dissolved oxygen (DURING AERATION AT ≤DESIGN MLVSS)	$2.0~\mathrm{mg/L}$	$2.0~\mathrm{mg/L}$
18	Retention time	12-40 hours	12-40 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 injector (venturi system) in combination with submersible pump.