CromaFlow Model CF50

SPECIFICATIONS

The Model CF50 treatment system is constructed with a fiberglass tank, noncorrosive internal parts, PVC schedule 40 and/or schedule 80 piping, stainless steel trash screening, two (2) submersible aeration pumps with venturi system, one (1) submersible transfer pump, one (1) RAS pump, two (2) submersible discharge pumps sized to meet total dynamic head requirements of the project with floating decanter, and HMI/PLC controls with remote monitoring/operations ready controls.

	$CROMAFLOW\ CF60$	U.S.A customary units	Metric
1	Tank dimensions	19'5"L x 7'4"W x 8'3"H	5.9 m x 2.24 m x 2.51 m
2	Rated treatment capacity	5,000 gallons/Day	18.93 m³/day
3	Total tank volume	4,600 gallons	17.41 m^3
4	Aeration volume	3,125 gallons	11.83 m^3
5	Clarifier volume	1,475 gallons	5.6 m^3
6	Discharge volume	500 gallons	1.89 m^3
7	Discharge cycles/day	10 cycles/day	10 cycles/day
8	Surge capacity	1,800 gallons	6.81 m ³
9	Aeration capability(with standard pumps)	$23 ext{ lbs. } O_2/day$	$10.43~\mathrm{kg}~\mathrm{O}_2/\mathrm{day}$
10	Maximum organic loading	$7 ext{ lbs. BOD}_5/ ext{day}$	3.2 kg BOD₅/day
11	${\rm Design\ influent\ BOD_5}$	$340~\mathrm{mg/L}$	$340~\mathrm{mg/L}$
12	Design influent TSS	$340~\mathrm{mg/L}$	$340~\mathrm{mg/L}$
13	Design influent nitrogen (Ammonia)	$40~\mathrm{mg/L}$	$40~\mathrm{mg/L}$
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 denitrification)	≤10 mg/L (Running denitrification)
18	Effluent TKN	≤20 mg/L (with nitrification)	≤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)	$0.40~\mathrm{lbs.}~\mathrm{O_2/hr}$	0.18 kg O ₂ /hr
17	Minimum design dissolved oxygen (DURING AERATION AT ≤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.