CromaFlow Inc. Model CF 15

SPECIFICATIONS

The Model CF 15 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) optional RAS pump, 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. Electrical is designed project

	CROMAFLOW CF 15	U.S.A Customary Units	Metric
1	Tank dimensions	11'3"L x 5'7"W x 5'7"H	3.4 m x 1.7 m x 1.7 m
2	Rated treatment capacity	$1{,}500~\mathrm{gpd}$	5.7 m³/day
3	Total tank volume	1,360 gallons	5.15 m^3
4	Aeration volume	950 gallons	3.4 m^3
5	Clarifier volume	410 gallons	1.55 m^3
6	Discharge volume	250 gallons	946.35 liters
7	Discharge cycles/day	6 cycles/day	6 cycles/day
8	Surge capacity	500 gallons	1.9 m ³
9	Aeration capability (with standard pumps)	6.7 lbs. O ₂ /day	$3.04 ext{ kg O}_2/ ext{day}$
10	Maximum organic loading	2.4 lbs. BOD ₅ /day	1.09 kg BOD₅/day
11	${\rm Design~influent~BOD_5}$	$250~\mathrm{mg/L}$	$250~\mathrm{mg/L}$
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 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)	$0.40~\mathrm{lbs.}~\mathrm{O_2/hr}$	$0.37~{ m kg~O_2/hr}$
17	Minimum design dissolved oxygen (DURING AERATION AT ≤DESIGN MLVSS)	$2.0~\mathrm{mg/L}$	2.0 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.