CromaFlow Inc. Model CF150

SPECIFICATIONS

The Model CF150 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, 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. Electrical is

	CROMAFLOW CF150	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	$15{,}000~ m gpd$	56.8 m³/day
3	Total tank volume	9,200 gallons	34.83 m^3
4	Aeration volume	6,650 gallons	25.2 m^3
5	Clarifier volume	2,550 gallons	9.65 m^3
6	Discharge volume	1,250 gallons	4.73 m^3
7	Discharge cycles/day	12 cycles/day	12 cycles/day
8	Surge capacity	3,636 gallons	13.76 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 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)	0.81 lbs. O ₂ /hr	0.37 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	12-50 hours	12-50 hours

designed project

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.