## CromaFlow Inc. Model CF 80

## SPECIFICATIONS

The Model CF 80 treatment system is constructed with two (2) fiberglass tanks, noncorrosive internal parts, stainless steel trash screening, floating decanter, PVC schedule 80 and 40 piping, three (3) 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 80	U.S.A Customary Units	Metric
1	Tank dimensions	29'8"L x 6'10"W x 6'10"H	9 m x 2.08 m x 2.08 m
2	Rated treatment capacity	8,000 gallons/day	$30.28~\mathrm{m}^3/\mathrm{day}$
3	Total tank volume	5,830 gallons	$22.1 \; \mathrm{m}^{3}$
4	Aeration volume	4,227 gallons	$16 \mathrm{\ m}^3$
5	Clarifier volume	1,603 gallons	$6.1 \text{ m}^3$
6	Discharge volume	800 gallons	$3.03 \; m^3$
7	Discharge cycles/day	10 cycles/day	10 cycles/day
8	Surge capacity	1,189 gallons	$4.5 \text{ m}^3$
9	Aeration capability (with standard pumps)	$24.4 \mathrm{lbs.}~\mathrm{O}_2/\mathrm{day}$	11.1 kg O <sub>2</sub> /day
10	Maximum organic loading	$15.2  ext{ lbs. BOD}_5/ ext{day}$	6.9 kg BOD₅/day
11	${\bf Design\ influent\ BOD_5}$	$340~\mathrm{mg/L}$	$340~\mathrm{mg/L}$
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	≤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 lbs. O <sub>2</sub> /hp-hr.	0.37 kg O <sub>2</sub> /hp-hr.
16	Oxygen transfer rate (OTR)	0.81 lbs. O <sub>2</sub> /hr	$0.37~{ m kg}~{ m O_2/hr}$
17	Minimum design dissolved oxygen (DURING AERATION AT ≤DESIGN MLVSS)	$2.0~\mathrm{mg/L}$	$2.0~\mathrm{mg/L}$
18	Retention time	12-50 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 or remote cell.

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.