

CromaFlow Inc. Model CF 120 SPECIFICATIONS

The Model CF 120 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, 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.

| | <i>CROMAFLOW CF 120</i> | <i>U.S.A Customary Units</i> | <i>Metric</i> |
|----|--|-------------------------------------|------------------------------------|
| 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 | 12,000 gallons/day | 45.4 m ³ /day |
| 3 | Total tank volume | 9,200 gallons | 34.83 m ³ |
| 4 | Aeration volume | 7,000 gallons | 26.5 m ³ |
| 5 | Clarifier volume | 2,200 gallons | 8.3 m ³ |
| 6 | Discharge volume | 1,000 gallons | 3.8 m ³ |
| 7 | Discharge cycles/day | 12 cycles/day | 12 cycles/day |
| 8 | Surge capacity | 4,000 gallons | 14.14 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 BOD ₅ /day |
| 11 | Design influent BOD ₅ | 340 mg/L | 340 mg/L |
| 12 | Design influent TSS | 340 mg/L | 340 mg/L |
| 13 | Design influent nitrogen (Ammonia) | 40 mg/L | 40 mg/L |
| 14 | Design influent TKN | 55 mg/L | 55 mg/L |
| 15 | Effluent CBOD (Carbonaceous) | ≤25 mg/L | ≤25 mg/L |
| 16 | Effluent TSS | ≤25mg/L | ≤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 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.