

SPECIFICATIONS

Octa™ System for PFAS Destruction

The Aclarity Octa™ system destroys PFAS compounds using a proprietary electrochemical process to break down contaminants. Each Aclarity Octa is outfitted with 8 reactors, and can treat up to 16 gallons per minute. The system is modular and additional skids are installed in parallel when flow rates or concentrations of PFAS increase. Aclarity's technology destroys PFAS on-site, eliminating PFAS from our environment and preventing the chemicals from migrating and contaminating down stream.

Aclarity's solution is robust enough to treat concentrated leachate or other wastewater streams. Octa incorporates reverse polarity for on-line cleaning as well as a Clean-In-Place (CIP) system for periodic cleaning of the reactors.



Octa Dimensions & Weight

- Installed Dimension: 8'W x 20'L x 10'H
- Shipping Dimension: 6'W x 20'L x 8.5'H
- The dry weight of the skid is 7700 lbs
- The skid is designed with forklift pockets for on-site handling

Facility Requirements

- Required minimum footprint, including service and operational access is 11 ft x 26 ft. Octas may be mounted with overlapping service corridors
- Diluting air equivalent to 7.5 cfm or 60 air changes per hour per 7.5 ft³ (0.213 m³) are required

Influent/Effluent Connections & Requirements

- 2" Male Camlock connections for feed and effluent
- 2" Male Camlock for main drain
- 1" Male Camlock for secondary drain
- 1" Male NPT for pan drain

Environmental Requirements

- Designed to be operated between 40°F to 122°F (4°C to 50°C)
- Dry storage between -20°F and 122°F (-29°C and 50°C)
- Wiring is all contained in corrosion resistant solid wire duct for protection from rodents and other environmental hazards

Electrical Requirements

- Each Octa requires 400 A, 240 VAC, 3-phase power
- Connection is through 2 fused disconnect switches which require two separate 200 A, 240 VAC, 3-phase connections
- Each Octa is provided with a single equipment ground point to avoid ground loops

Materials of Construction

- The Octa is made of low maintenance, corrosion resistant, 304 stainless steel, with integrated secondary containment and provisions for seismic restraint
- Schedule 80 PVC piping

HMI & Controls

- Siemens control system (PLC, I/O Modules, 24V)
- External communication and parameter setting via a machine mounted 10" HMI touch screen, or Ethernet, Wi-Fi, or cellular connection

Operational Information

- Output totalizer
- pH readings
- ORP readings
- Effluent flow rate
- Temperature

SUMMARY

PFAS contamination is an emerging regulatory and public health issue. On-site PFAS destruction is a way to address the problem of PFAS contamination without creating an additional waste stream. Aclarity's technology has the ability to destroy PFAS forever, removing the majority of PFAS for our environment and preventing the PFAS from migrating and contaminating even further.

SAFETY & ENVIRONMENTAL FEATURES

Fluid Containment

- Octa includes integrated secondary containment for 125% of the system fluid volume, with drain provisions for connection to recovery tanks or other containment control systems.

Seismic

- Octa includes foundation tie downs for seismic restraint.
- Rack structure meets California requirements for non-structural seismic bracing for floor mounted equipment.

Ventilation

- The system produces hydrogen, oxygen, chlorine, and hydrogen sulfide gases which are vented through an activated carbon filter. System requires operation in a well-ventilated area.

Electrical

- All electrical cabinets are designed in compliance with the NFPA 70 National Electrical Code and NFPA 79 Electrical Standard for Industrial Machinery and have provisions for lock out/tag out.
- E-stops provided at both ends of the skid. All wiring and bus bars are either enclosed or guarded.
- All electrical enclosures & junction boxes are NEMA 3R/IP54 rated.

How Aclarity's Technology Destroys PFAS

Wherever there's PFAS, destroy with Aclarity.

