

PRODUCT DESCRIPTION



Designed specifically to meet strict project specifications, the MEMPAC-M500 is Cloacina's unrivaled municipal grade membrane bioreactor with the longest life cycle of any of Cloacina's package wastewater treatment plants. The MEMPAC-M500 is designed for municipal clients with stringent discharge requirements or the desire to reclaim treated effluent for reuse or ground disposal.

The MEMPAC-M500 incorporates headworks primary treatment, activated sludge and membrane clarification and optional disinfection as the final stage of treatment.

This is the only MEMPAC model that comes standard with Cloacina's premium equipment package. The MEMPAC-M500 typically features additional redundancy within the membrane system and ancillary equipment. All tankage and equipment skids are fabricated from stainless steel and all interior and exterior components are manufactured from high-quality, corrosion-resistant materials. Prior to shipment, all components are factory-installed and wet tested as a complete system. The compact design of the MEMPAC-M500 makes it ideal for projects with small footprints and remote locations.

Cloacina's MEMPAC-M500 is the industry's only membrane bioreactor that utilizes Forward Activated Sludge (FAS) to provide the motive force to keep the membrane interface at the proper viscosity and the maximum dynamic loading of the reactor volumes while maintaining the ideal Biological Nutrient Removal (BNR).

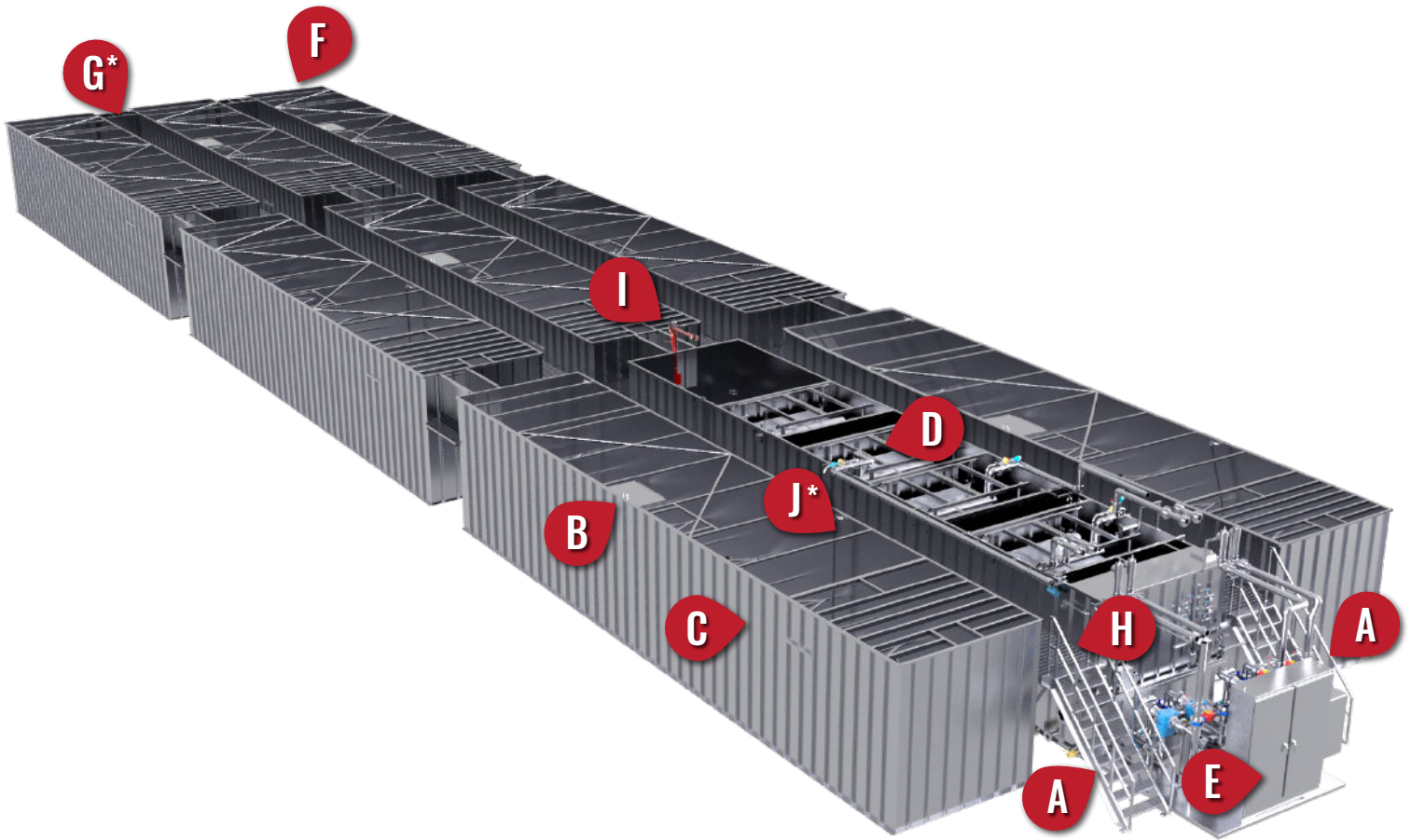
TYPICAL INFLUENT PARAMETERS			
CONSTITUENT	VALUE	UNITS	NOTES
Flow	25,000 - 500,000	GPD	
TSS	300	mg/L	
BOD5	350	mg/L	
Temperature	41 - 68	°F	Average
TN	50	mg/L	

TYPICAL EFFLUENT PARAMETERS			
CONSTITUENT	VALUE	UNITS	NOTES
pH	6.0 - 8.5		
BOD5	<10*	mg/L	
TSS	<10*	mg/L	
TN	<10*	mg/L	

**More stringent effluent requirements possible*

TYPICAL APPLICATIONS
Municipal waste, schools, detention centers, theme parks, zoos, housing developments, and small to medium municipalities. Can also be used to supplement existing wastewater treatment plants.

MEMPAC™ - M500 (MUNICIPAL)



*one of multiple locations are indicated

- A:** Aluminum stairs and platform(s)
- B:** All process analytical sensors are mounted on the Cloacina Slide Rail System and are accessible from the inspection platform
- C:** Corrosion-resistant 304 stainless steel tankage and components come standard
- D:** Redundant membrane equipment
- E:** The electrical panel and controls system are factory-installed and tested prior to shipping
- F:** Low maintenance regen blowers with optional sound attenuation or fully attenuated positive displacement packages
- G:** Open flow channels between tanks for scum management
- H:** Full length catwalk between all tanks for maximum access
- I:** Movable davit crane to lift submersible equipment
- J:** Submersible mixers and pumps mounted on slide rail

MEETS STRINGENT MUNICIPAL DISCHARGE AND RE-USE REQUIREMENTS