

Advanced Modular Plant (AMP) Systems

Description:

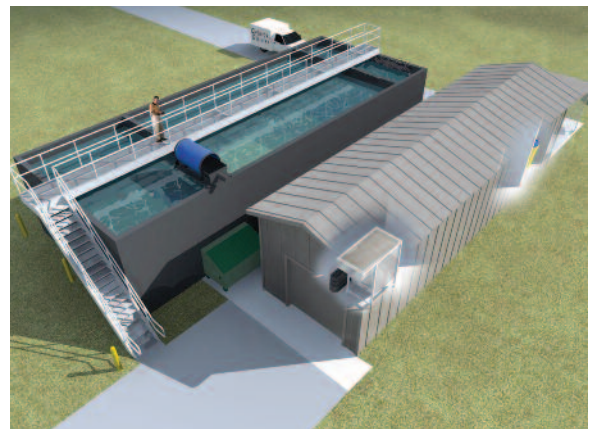
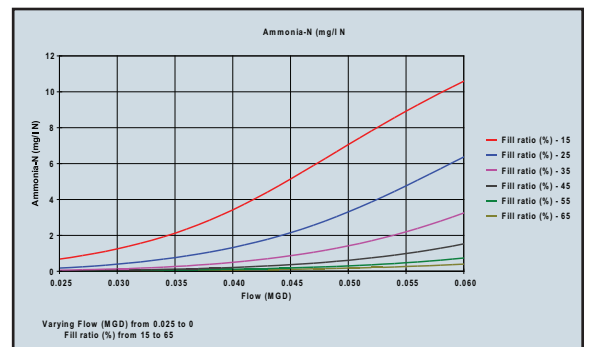
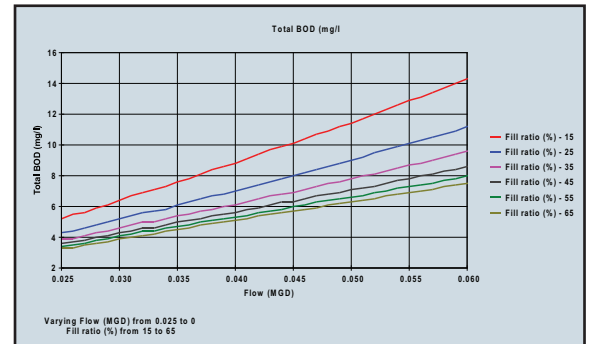
The Advanced Modular Plant (AMP) system is a pre-engineered system for use in small flow applications from new plants to add-ons to existing. The AMP is offered in Moving Bed Biological Reactor (MBBR), Integrated Fixed-film Activated Sludge (IFAS), and IFAS+ (Total Phosphorus removal) modes. All plants are offered in steel tanks which include a two stage biological and sludge holding tank. Also included in the base system are the secondary clarifier, process blowers, influent drum screen, controls, system biomass carriers, and sludge holding decanter.

The central system is the MBBR/IFAS fixed film system which allows the AMP to meet a wide range of flows and loads. The innovative, fixed-film moving bed process uses thousands of special suspended biomass carriers designed to create an enormous total surface area biofilm growth.

The process can be successfully used for both BOD and nutrient removal, and is suitable for municipal and industrial wastewater treatment plants. The flexibility of the system also makes it a cost-effective solution for the construction of new plants.

Modular plants also offer greater flexibility for a broad range of flows and applications. For very strict effluents modular add-ons such as disc or sand filtration, membranes, and UV disinfection are offered.

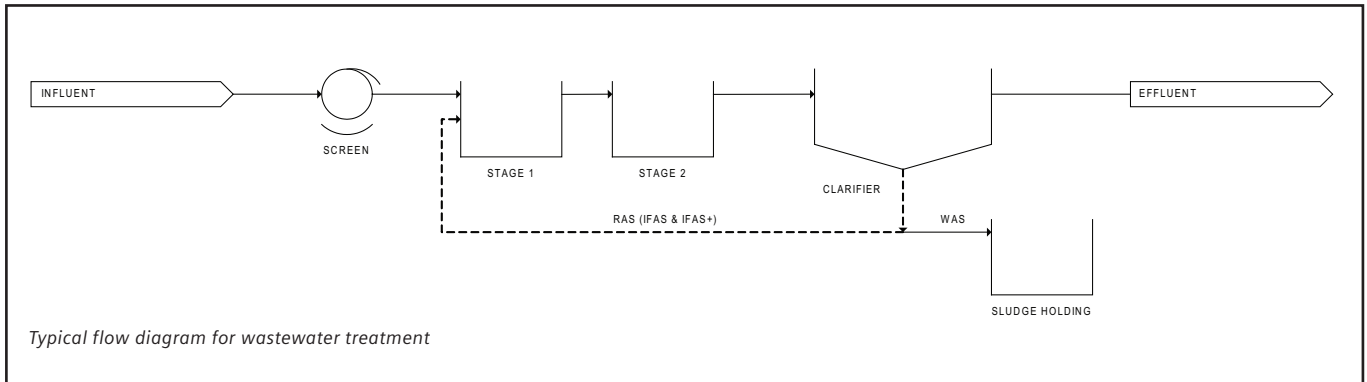
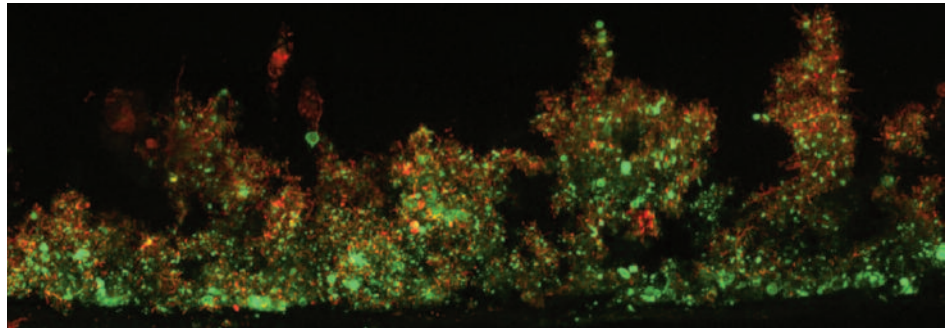
Typical performance for an AMP30



Features

- Lower capital and operating costs than conventional alternatives.
- Small footprint
- Heavy duty carriers have a life expectancy that can exceed 20 years.
- Flexible design with the modular system setup.
- Simple media addition to the process allows for easy plant expansion.
- Intense media mixing within the reactor, coupled with the unique “fully-open, fully-protected” bio-mass carrier design.
- Toxic upsets and hydraulic “wash out” events will not affect the entire microbial population in the bio-film, making process recovery fast and smooth.
- The biofilm rich with autotrophs allows for stable nitrification, even at low temperatures.

AMP Model	Process	Capability	Flow Ranges
AMP	MBBR	BOD + Nitrification	25k to 100k GPD
AMP-I	IFAS	Biological Nutrient Removal	50k to 250k GPD
AMP-I+	IFAS + Chem.	Enhanced Nutrient Removal	50k to 250k GPD
Dimensions			
Tank	11'-9" wide x 11'-6" wall height x 20' to 50' length		
Clarifier	8'-0" to 32'-0" diameter x 11'-6" wall height		
Material	All tanks made from carbon steel and primed before shipment.		
Optional add-on equipment			
Forty-X™ Disc Filter	Astrasand™ Filter	Clean Water Membrane	UV Disinfection



Siemens
 Water Technologies
 P.O. Box 1604
 Waukesha, WI 53187
 800.524.6324 toll-free
 262.547.0141 phone
 262.547.4120 fax

© 2010 Siemens Water Technologies Corp.
 EN-AMPdr-DS-0110
 Subject to change without prior notice.

Forty-X™ is a trademark of Siemens, its subsidiaries or affiliates.
 Astrasand is a trademark of Paques bv

The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.