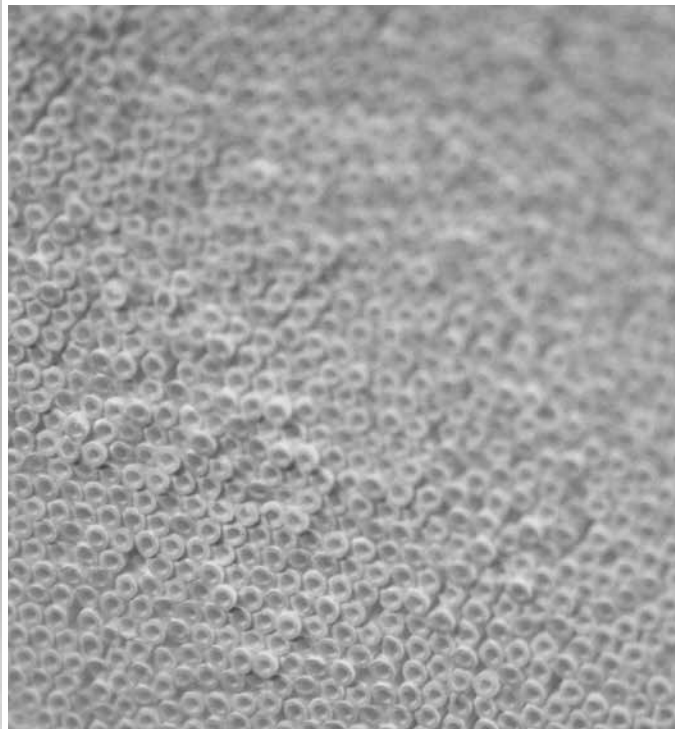


AQUADYN® Ultrafiltration Modules

For Storm Water Management:
An Erosion Control Measure (ECM)



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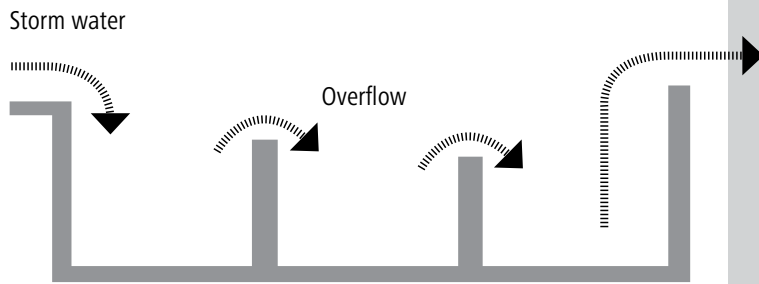
ADVANCED SEPARATION TECHNOLOGIES

AQUADYN® Ultrafiltration Modules

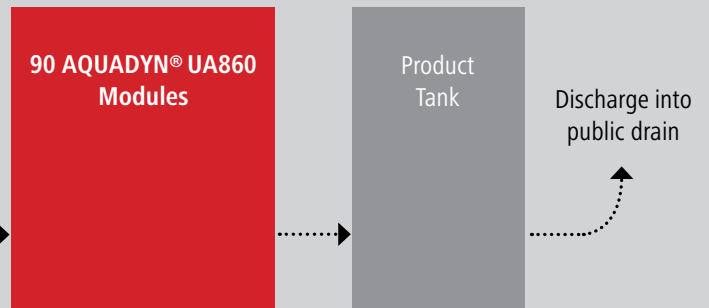
For Storm Water Management: An Erosion Control Measure (ECM)

As most tropical countries face unpredictable rain falls, building sites have to be managed differently. In Singapore an effective Erosion Control Measure (ECM) was required at a building site, in order to treat the storm water before discharging it to the public drain. According to the water discharge standards set forth by the Public Utilities Board, the silty water needed to be treated to < 50 mg/L of TSS before discharge.

For the duration of the construction three systems with a total of 90 AQUADYN® UA860 modules were installed at the construction site. The ultrafiltration modules provide a total membrane area of 4,050 m². Pre-treatment to the ultrafiltration is achieved by implementing 100 µm filter bags.



The provision of a compact and cost effective system managing rapid variations of wastewater volumes, delivering consistent wastewater quality that meet Singapore discharge limits and requiring minimum operator attendance were major challenges in this projects.



In order to manage the incoming variations of volumes of water and to save costs, the plant was equipped with a sensor to automatically adjust the process depending on the feed water level.

Due to this efficient and reliable Erosion Control Measure the customer was able to realize the construction without any delays caused by weather conditions.

ADVANTAGES

- » mobile and compact solution even for temporary applications
- » robust and durable modules
- » cost effective solution with minimal need for operator attendance
- » ability to adapt to rapid variations of wastewater volumes

Project specifications

	Feed Water*	Effluent
Turbidity	~ 900 NTU	< 1 NTU
TSS	~ 4000 mg/L	< 1 mg/L

Plant design

Commissioning	April 2011
System	K30-UA860
Module type	AQUADYN® UA860
Amount of modules	90
Total membrane area	4,050 m ²
Capacity	180 m ³ /h
Energy consumption	~ 0.2 kW/m ³