

# Actiflo® Pack Mini




## The Ultimate Microsand Enhanced Clarifier

The Actiflo® Pack is a very compact and fully standardized clarifier package plant. It can be used for various applications such as drinking water, waste water treatment, re-use or process water. This product range is based on the Actiflo process developed by Veolia that uses microsand and polymer in the flocculation tank to increase settling velocity.

Veolia has more than 20 years of design, commissioning and operational experience. Over 1,800 Actiflo units have been installed worldwide by Veolia, including more than 900 package plants.

This package plant is integrating the continuous innovation carried out by Veolia in order to always stay on the cutting edge to meet customer needs and performance excellence.



Flow rates  
from 3 to 15  
m³/h



Pharma



Cosmetics



Food



Beverage



Power



Laboratory



Electronics



Hydrogen



General Industry



Drinking Water



Municipal WW



### FEATURES & BENEFITS

- High treatment efficiency: Turbidity and TSS removal up to > 99%; treats all water and wastewater sources
- Extremely quick start-up time: Reaches treatment efficiency within few minutes
- Process stability: The microsand buffers the effect of raw water flow or load variations, making the process very user friendly and easy to operate
- Quick optimisation: Short hydraulic retention time makes it feasible for the process to adjust quickly to changing raw water quality
- Efficient use of chemicals: Microsand ballasted flocculation and settling helps to avoid common chemical overdosing to achieve good clarification performance
- Efficient in cold water applications: Suitable for use also in Nordic regions
- Compact design: Can be easily integrated and retrofitted into existing structures
- Modular: Units may be combined to achieve treatment of high flow rates

### HYDREX® CHEMICALS

Hydrex™ 3000 & 6000 water treatment chemicals from Veolia Water Technologies should be used for optimized plant operation.



### APPLICATIONS

- Surface and ground water treatment
- Very high or very low turbidity water and wastewater
- Treatment of water with high natural organic matter (colour, TOC)
- Efficient treatment of algae, phosphorus, heavy metals, oil & grease, particle counts, crypto and giardia, coliforms
- Primary, secondary and tertiary clarification of wastewater
- Treatment of biofilter backwash water and trickling filter effluents
- Stormwater and combined sewer overflow treatment, reverting to effluent polishing during dry weather
- Industrial process water treatment for cooling tower make-up or prior to demin plants
- Pre-treatment to membrane and ion exchange systems
- Industrial wastewater treatment in all market segments, including leachate and run-off water
- Recycling/Reuse of municipal and industrial effluents

### ASSOCIATED SERVICES

Local after-sales service and support teams offer preventative and corrective maintenance programs to ensure the long-term, efficient operation of installed plant





## System Operating Parameters

Model	Unit	Single Model
Min Feed Flowrate <sup>(1)</sup>	m³/h	3
	US gpm	13,20
Max Feed Flowrate	m³/h	15
	US gpm	66,04
Coagulation Volume	m³	0.42
Flocculation Zone Volume	m³	0.58
Mirror Surface	m²	0.125

Drinking and process water: flow rate from 3 to 7 m³/hr

Wastewater: flow rate from 3 to 15 m³/hr

<sup>(1)</sup> In case of operation at <5 m³/h, the separation of the sludge from microsand should be investigated due to over-mixing in maturation tank.

## Pipes Connections

Model	Unit	Single Model
Feed	DN	50
	in	1.96
Outlet	DN	100
	in	3.93
Sludge	DN	32
	in	1.25
Coagulation Drain	DN	40
	in	1.57
Flocculation Drain	DN	40
	in	2
Settler Drain	DN	40
	in	2

## Materials of Construction

Tank	Coated Carbon steel tank, FRP tank (only available in Solys China)
Internal Components	SS304 tank
Recirculation Pipework	HDPE

## Power Requirements

Version	ISO Spain	ISO China	ASME US	ASME Canada
Voltage <sup>(2)</sup>	400 V	380 V	460 V	460 V
Frequency	50 Hz	50 Hz	60 Hz	60 Hz
Phases	3Ph + E	3Ph + E	3Ph + E	3Ph + E

<sup>(2)</sup> 220V is optional.

## System Dimensions

Model	Unit	Single Model
Total Installed Length	m	3.28
	in	10.76
Total Installed Width	m	1.43
	in	4.69
Total Installed Height	m	2.55
	in	8.36
Clearance Height	m	3.55
	in	11.64
Empty Weight	kg	1800
	lb	3968
Operating Weight	kg	3400
	lb	7495

## Environmental Conditions

Parameter	Unit	Value
Minimum ambient temperature	°C	-10
	°F	14
Maximum ambient temperature	°C	40
	°F	104
Maximum humidity	%	95

## Feed water Requirements

Parameter	Unit	Value
Minimum water temperature	°C	5
	°F	41
Maximum water temperature	°C	40
	°F	104
Maximum Inlet TSS	mg/l	1000
Maximum Inlet particle size	mm	2

## Typical Treated Water Quality

Parameter	Unit	Value
TSS Removal Efficiency	%	Up to 99% <sup>(3)</sup> Up to 90% <sup>(4)</sup>

<sup>(3)</sup> drinking and process water <sup>(4)</sup> wastewater

In both cases function on the application, raw water quality and chemical dosages