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## **ACTIFLO® Pack ACP2**

#### 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 floculation 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 worlwide 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.



#### **•** 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
  Efficient in cold water applications: suitable for
- use also in Nordic regions
- Fully standardized design: complete documentation readily available
- Numerous standard options and alternatives to enhance performances and monitoring

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- Industrial process water: surface/ground water treatment, pre-treatment to membrane and ion exchange systems
- Municipal and industrial wastewater treatment: primary/secondary/tertiary treatment, biofilter backwash water and trickling filter effluents
- Stormwater and combined sewer overflow treatment, reverting to effluent polishing during dry weather
- Recycling/reuse of municipal and industrial effluents

#### **HYDREX<sup>™</sup> CHEMICALS**

Hydrex<sup>™</sup> 3000, 6000 & 9000 water treatment chemicals from Veolia Water Technologies are recommanded for optimized plant operation.

#### **ASSOCIATED SERVICES**

Local aftermarket service and support teams offer preventative and corrective maintenance programs to ensure the long-term, efficient operation of installed plants.



Power

General

Industry

Drinking

**Municipal** 

Water

WW

## WATER TECHNOLOGIES



#### System Operating Parameters

Model	Unit	ACP2-15	ACP2-30	ACP2-40	ACP2-45
Min Feed Flowrate <sup>(1)</sup>	m³/h	21	25	38	50
	US gpm	92	110	167	220
Max Feed Flowrate	m³/h	125	250	375	500
	US gpm	550	1100	1650	2200
Coagulation Volume	m³	1.54	2.81	4.31	5.73
Floculation Zone Volume	m³	4.58	8.34	12.79	17.28
Mirror Surface	m²	1.04	2.21	3.69	4.14
Model	Unit	ACP2-55	ACP2-60	ACP2-70	ACP2-75
	Unit m³/h	ACP2-55 75	ACP2-60 100	ACP2-70 156	ACP2-75 178
<b>Model</b> Min Feed Flowrate <sup>(1)</sup>					
Min Feed Flowrate <sup>(1)</sup>	m³/h	75	100	156	178
	m³/h US gpm	75 330	100 440	156 686	178 783
Min Feed Flowrate <sup>(1)</sup>	m³/h US gpm m³/h	75 330 750	100 440 1000	156 686 1563	178 783 1781
Min Feed Flowrate <sup>(1)</sup> Max Feed Flowrate	m <sup>3</sup> /h US gpm m <sup>3</sup> /h US gpm	75 330 750 3300	100 440 1000 4400	156 686 1563 6877	178 783 1781 7836

<sup>(1)</sup> Selection of models must be done according to water characteristics and treatment requirements

#### **System Dimensions**

System Dimensions					
Model	Unit	ACP2-15	ACP2-30	ACP2-40	ACP2-45
Total Installed Longth <sup>(2)</sup>	m	4.40	6.50	7.70	9.50
Total Installed Length <sup>(2)</sup>	ft	14.40	21.30	25.30	31.20
	m	3.00	3.20	3.50	3.60
Total Installed Width <sup>(2)</sup>	ft	9.80	10.50	11.50	11.80
	m	5.40	5.70	6.10	6.00
Total Installed Height <sup>(2)</sup>	ft	17.70	18.70	20.00	19.70
	m	6.40	6.70	7.10	7.00
Clearance Height	ft	21.00	22.00	23.30	23.00
	kg	4700	7500	9500	9700
Empty Weight	lb	10400	16500	20900	21300
Operating Weight	kg	26000	37500	53000	64000
	lb	57200	82500	116600	140800
Model	Unit	ACP2-55	ACP2-60	ACP2-70	ACP2-75
	m	11.20	12.50	14.00	15.00
Total Installed Length <sup>(2)</sup>	ft	36.70	41.00	45.90	49.20
<b>-</b>	m	4.20	4.90	5.40	5.50
Total Installed Width <sup>(2)</sup>	ft	13.80	16.10	17.70	18.00
	m	7.00	7.00	7.50	7.50
Total Installed Height <sup>(2)</sup>	ft	23.00	23.00	24.60	24.60
	m	8.00	8.00	8.50	8.50
Clearance Height	ft	26.20	26.20	27.90	27.90
	kg	12500	15500	20000	21700
Empty Weight	lb	27500	34100	40090	47840
	kg	90000	122000	180000	200000
Operating Weight					

<sup>(2)</sup> Including recirculation line(s), ladder and embedded control panel.

Designed and Manufactured by Solys Veolia

lb

198000

268400

396000

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440000

## ACTIFLO® Pack ACP2



#### **Pipes Connections**

Model	Unit	ACP2-15	ACP2-30	ACP2-40	ACP2-45
Feed	DN	150	250	300	300
	in	5.90	9.84	11.80	11.80
	DN	200	250	300	350
Outlet	in	7.87	9.84	11.80	13.70
Sludge	DN	40	40	50	50
	in	1.57	1.57	1.96	1.96
Coagulation Drain	DN	50	50	50	50
	in	1.96	1.96	1.96	1.96
Flocculation Drain	DN	50	50	50	50
	in	2	2	2	2
Settler Drain	DN	100	100	100	100
	in	4	4	4	4

Model	Unit	ACP2-55	ACP2-60	ACP2-70	ACP2-75
Food	DN	400	450	600	600
Feed	in	15.70	17.70	23.60	23.60
	DN	450	2x400	2x450	2x450
Outlet	in	17.70	2x15.7	2x17.7	2x17.7
Sludge	DN	65	65	100	100
	in	2.55	2.55	3.93	3.93
	DN	50	50	100	100
Coagulation Drain	in	1.96	1.96	3.93	3.93
Flocculation Drain	DN	50	50	100	100
	in	2	2	4	4
Settler Drain	DN	100	100	200	200
	in	4	4	8	8

#### **Feed water Requirements**

Parameter	Unit	Value
Minimum water temperature	°C	2
	°F	35
Maximum water temperature	°C	40
Maximum water temperature	°F	104
Maximum Inlet TSS <sup>(3)</sup>	mg/l	1500
Maximum Inlet Turbidity <sup>(3)</sup>	NTU	1000
Maximum Inlet particle size	mm	2

<sup>(3)</sup> For somme applications, max acceptable inlet TSS or Turbidity should be lower in order to warranty performances.

### **Typical Treated Water Quality**

Parameter	Unit	Value
TSS Removal Efficiency	%	Up to 99% <sup>(4)</sup> Up to 90% <sup>(5)</sup>

<sup>(4)</sup> drinking and process water <sup>(5)</sup> wastewater

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

#### **Environmental Conditions**

Parameter	Unit	Value
Minimum ambient	°C	5
temperature	°F	41
Maximum ambient	°C	40
temperature	°F	95
Maximum humidity	%	104

Standard design can be modified on request.

#### Materials of Construction

Tank	Coated Carbon Steel
Internal Components	SS304L
Recirculation Pipework	HDPE

Other materials available on request.

#### **Power Requirements**

Version	ISO Spain	ISO China	ASME US	ASME Canada
Voltage <sup>(6)</sup>	400 V	400 V	460 V	575 V
Frequency	50 Hz	50 Hz	60 Hz	60 Hz
Phases	3	3	3	3

<sup>(6)</sup> Other voltages available on request.

Designed and Manufactured by Solys Veolia

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