

FILTRATION, DEWATERING AND SLUDGE STORAGE SYSTEMS

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ECODEPUR®

ECODEPUR®SLUDGE DRY Filtration/Dewatering and Bagging Systems are a technology used in wastewater treatment to separate the solid phase from treated water and significantly reduce its volume and moisture content.

The systems combine all essential components in a compact system, offering exceptional performance and ease of installation for various sludge dewatering applications.

The systems presented can range from small manual units to fully automatic and pressurized units. If it is necessary to increase the sludge dewatering capacity of a system, it is possible to add an additional bagging module, connected to the existing one, using the existing automation, saving additional costs.

Sludge dewatering allows for significant savings in handling and transport due to the reduction in sludge weight and volume.

CHARACTERISTICS

- Bag module for efficient sludge dewatering;
- Polymer preparation unit and polymer dosing pump for optimized sludge conditioning;
- Sludge feed pump and in-line mixer for precise operation;
- Level sensor for monitoring;
- Control panel for seamless plug-and-play functionality.

MAIN ADVANTAGES

- Plug & play solution;
- Fully automatic;
- Up to 70-80% water savings;
- Zero water consumption during washing.

APPLICATION

The application of Sludge Bagging Filtration/Dewatering Systems is recommended in wastewater treatment plants, for example:

- Resorts, hotels and campsites;
- Industrial effluents;
- Chemical industry.



MANUAL SYSTEMS

AISI304 stainless steel structure, with capacity for the number of bags, including sludge distribution, water collection tray and drain outlet piping.

MODEL	N. ° BAGS	MATERIAL	LENGTH (mm)	WIDTH (mm)	HIGHT (mm)	SLUDJE INLET	Ø DRAIN OUTLET	WEIGHT (kg)
2 BM¹	2	AISI304	1.140	560	1.500	Top opening	2"	120
3 BM	3	AISI304	1.550	550	1.700	Flange DN50	74 mm	150
6 BM	6	AISI304	1.550	1.050	1.700	Flange DN50	74 mm	300

NOTE: All models are supplied with 100 filtration bags 80 l, bag closures and locking wrench for closures

¹ 2BM model is supplied without stainless steel basket bags support.

AUTOMATIC SYSTEMS

AISI304 stainless steel structure, with capacity for the number of bags according model, including sludge distribution, water collection tray, drain outlet piping. It includes an electronic control panel with PLC for automatic operation, including starting and stopping sludge pumps and polyelectrolyte. The pneumatic valve DN50 for mounting inlet flange mounting, commanded by the control panel.

Slurry pressurizing system with compressed air, allowing to increase the filtration efficiency of the bags. The sludge feed can be by pumping or gravity.

MODEL	N. ° BAGS	MATERIAL	LENGHT (mm)	WIDTH (mm)	HIGHT (mm)	SLUDJE INLET	Ø DRAIN OUTLET	WEIGHT (kg)
3 BCAVP	3	AISI304	1.900	550	1.950	Flange DN50	74 mm	750
6 BCAVP	6	AISI304	1.900	1.050	2.000	Flange DN50	74 mm	1.530
12 BCAVP	12	AISI304	3.350	1.100	2.000	Flange DN50	124 mm	2.950

Note: All models are supplied with pneumatic valve, control panel compressor, 100 filter bags 80 l, bag closures and locking wrench for closures.

ESTIMATED TREATMENT CAPACITY

EQUIPAMENT	MAX. HYDRAULIC FLOW (m3/h)	DRY MATTER (%)	M3/DAY (S.sS. 1%)	S.S./DAY (kg)(kg)
2 BM	1-2	0,5-4	2-4	10-20
3 BM	1-3	0,5-4	3-6	15-30
3 BCAVP	2-4	0,5-4	3-6	35-50
6 BM	2-6	0,5-4	6-12	30-60
6 BCAVP	4-6	0,5-4	6-12	70-100
12 BCAVP	8-12	0,5-4	14-20	140-200

POLYELECTROLYTE PREPARATION SYSTEMS

As adjuvant, is necessary only polyelectrolyte addition, in order to cause sludge flocculation. The polyelectrolyte preparation systems are constituted by a dosing tank (includes bottom cleaning valve) with mounted mixer, dosing pump (including suction line) and polyelectrolyte diluent with feed water inlet, all system as following characteristics:

MODEL	DOSING TANK		MIXER	POLYELECTROLITE DILUIDER	DOSING PUMP	
	MATERIAL	VOLUME (L)	MATERIAL SHAFT AND PROPELLER	MATERIAL	MATERIAL	FLOW (L/h)
2 BM	PE	300	AISI304 – 0,18 kW	AISI304	AISI316 – 0,25 kW	36-125
3 BM	PE	300	AISI304 – 0,18 kW	AISI304	AISI316 – 0,25 kW	36-125
3 BCAVP	PE	300	AISI304 – 0,18 kW	AISI304	AISI316 – 0,25 kW	36-125
6 BM	PE	500	AISI304 – 0,18 kW	AISI304	AISI316 – 0,3 kW	60-200
6 MCAVP	PE	500	AISI304 – 0,18 kW	AISI304	AISI316 – 0,3 kW	60-200
12 BCAVP	PE	1.000	AISI304 – 0,75 kW	AISI304	AISI316 – 0,3 kW	90-300

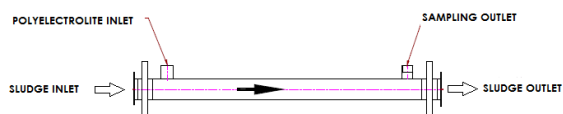
Note: The supply of reagents is excluded.

OPTIONAL

STATIC MIXER

Static mixer sludge / polyelectrolyte completely built in stainless steel AISI304, to be installed between pneumatic valve (if equipped) and the upper sludge distribution.

Includes sampling outlet for flocculation verification.



TRANSPORTATION CAR

Carrying bag carrier, with manual crank lift system, built in carbon steel.



CONTACTS

Zona Industrial Casal dos Frades,
Rua B, Lote 68
2435-661 Seiça - Ourém | PORTUGAL
geral@ecodepur.pt
+351 249 571 500
www.ecodepur.pt

WATER AND WASTEWATER TECHNOLOGIES

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