

Dewatering Bag Filters

Industrial and Municipal Process Equipment Packages

Develop

process solutions partnerships to find efficiencies on new or existing process.

Design

- machines for solids recovery, liquid clarification, and minimize water consumption.

Deliver

- project specific solutions for better economic, and environmental process performance.



DRAIMAD 12B-PACK

Capacity up to 400 lbs 200 kg

MANUFACTURE

DRYCAKE's technical department is able to develop all the required design activities from feasibility to as-built. Process Validation can be validated using our lab or on-site pilot services.

Our equipment is manufactured in high quality Stainless Steel , and is fully customizable according to project requirements and needs.

The production team is composed by assemblers and certified welders, experts in TIG (Tungsten Inert Gas) welding, a process of arc welding with consumable electrode (Tungsten), under protection of inert gas. After the welding processes, the Stainless Steel is passivated by our operators.

Quality control during the entire design process guarantees the compliance with Customer's technical requirements, good manufacturing practices and compliance with UL and CSA, ASMI, ANSI Standards and certifications.

All equipment is subject to 3rd party witnessed factory acceptance test prior to shipment.



**DRAIMAD
06B-PACK**

OPERATION

The **TEKNOBAG®-DRAIMAD®** system facilitates the dewatering of any sludge coming from wastewater treatment plants using disposable filter bags. This system is modular and is designed to optimize the filling and initial dewatering cycle of the bags.

After **few hours** of operation, dry solid content of **15 to 20%** can be achieved, depending upon the nature of the sludge. After the initial dewatering stage on the machine, the bags are sealed and removed with a special bag trolley and stored in the open. During this second phase, sludge weight and volume continue to reduce regardless of weather condition. After **10 to 15 days of storage**, a cake of **50 to 90%** dry solid content is achieved. The special water repellent material of the bags prevents rainwater from entering into the bag but allows dehydration of the contents by evaporation.

Modules can be fitted with a control panel, which can automate the filling cycle and is also capable of controlling the pressurization of the process. An option which if fitted can maximize the filtering capacity of the machines.

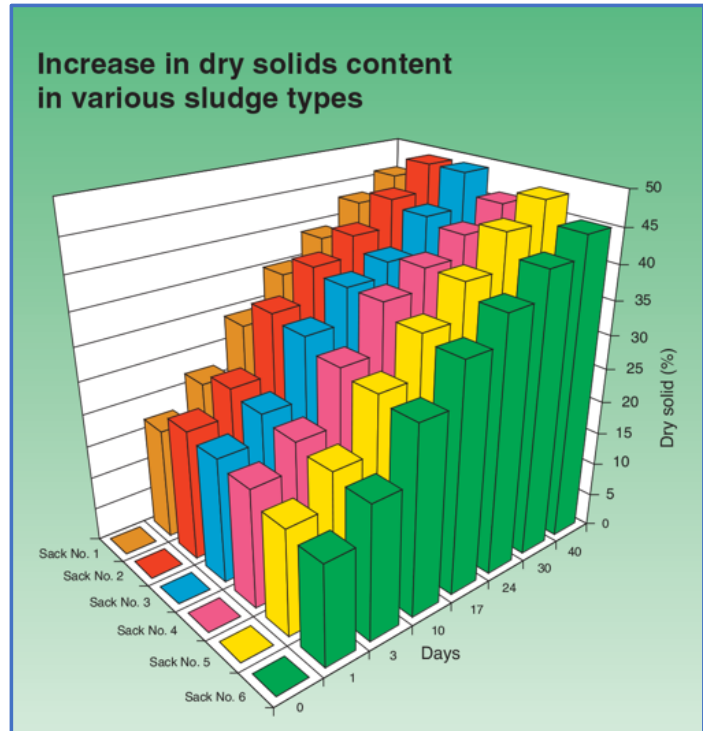
Capacity up to 400 lbs

200 kg

Particles > 100µm S
Solid Capture Ratio of 90%

FEATURES

- ✓ Manual or automatic operation
- ✓ Quick and easy installation
- ✓ Low energy consumption
- ✓ Compactness and low space requirements
- ✓ Complete **Plug & Play system**
- ✓ Manufactured in Stainless Steel AISI 304 and 316(L)
- ✓ Special TNT water repellent bags
- ✓ Option of pressurization system
- ✓ Ability to alter the operating cycle to handle sludge with varying characteristics
- ✓ Low and easy maintenance with a specially designed sack trolley for clean handling the full sacks

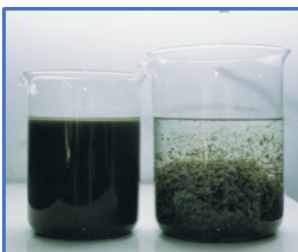


Sludge dryness over time

With over thousands of installation worldwide, the **DRAIMAD** is a proven solution for your dewatering needs up to 5,000 population equivalent.



DRAIMAD 12B-PACK



Sludge flocculation



Dewatering process



Sludge after 24h



Sludge after 30 days

MODEL & DIMENSION

Various models are available, with 2, 3, 6 and 12 sacks. Operation may be manual, with filtration taking place under gravity, or automatic with pressurized filtration. Multiple units may be installed, either in series or in parallel, to meet all requirements.

DRAIMAD Model *	Length		Width		Height		Weight **	
	mm	in	mm	in	mm	in	kg	lbs
02B-PACK	1500	59	550	22	2000	79	700	1540
03B-PACK	1900	75	550	22	2000	79	1000	2200
03B-PACK-P	1900	75	550	22	2000	79	1100	2400
06B-PACK	1900	75	1100	44	2000	79	2000	4400
06B-PACK-P	1900	75	1100	44	2000	79	2100	4600
12B-PACK	3350	132	1100	44	2000	79	4000	8800
12B-PACK-P	3350	132	1100	44	2000	79	4100	9000

* Other model on demand

** Full load



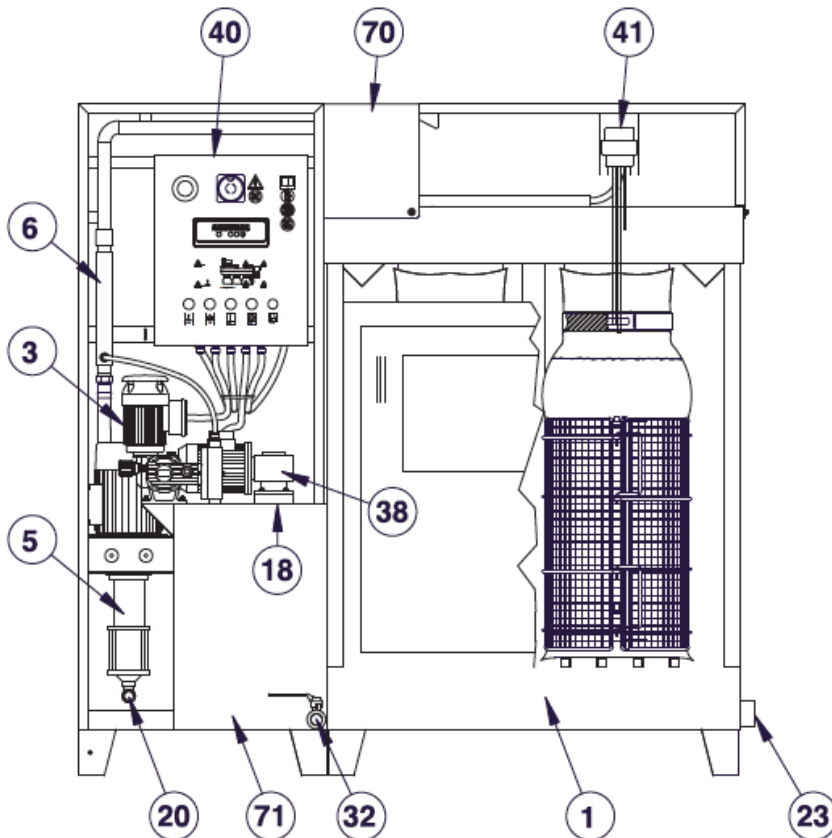
06B-PACK-L in line

DRAIMAD Model *	Capacity		GPD 2%DS	GPD 1%DS
	kg	lbs		
02B-PACK	23	50	160	500
03B-PACK	35	77	225	450
03B-PACK-P	50	110	330	660
06B-PACK	70	154	450	900
06B-PACK-P	100	220	550	1100
12B-PACK	140	308	900	1800
12B-PACK-P	200	440	1100	2200

* Capacities based on municipal sludge with bag change every 2 days.

PROCESS & INSTRUMENTATION

Pack Series: Plug & Play



#	Description
1	DRAIMAD Unit
3	Polymer Pump
5	Sludge Pump
6	Static Mixer
18	Inlet Water + Polymer
20	Sludge inlet
23	Filtrate Outlet
32	Drain Polymer Tank
38	Polymer stirrer
40	Control Panel
41	Level Sensor
70	Flocculation Tank
71	Polymer tank



06B-PACK-P Capacity of the bags optimize by the pressure system

EQUIPMENT RANGE

Mechanical Dewatering

- Decanter Centrifuge
- High Speed Centrifuge
- Gravity Belt Press Thickener
- Belt Press
- Scrudrain: Screw Thickener
- Screw Press
- DRAIMAD Dewatering bag skid

Thermal Systems

- Sludge Dryers
- Evaporators

Screening

- Multi-Rake Bar Screens
- Perforated Plate Screens
- Internally Fed Drum Screens

Grit and FOG Removal Systems

Solid Waste

- Material Sorting & Screening

Polymer Preparation

- Dry & Liquid polymer systems

Materials Handling Systems

- Shaftless Screw Conveyors
- Belt Conveyors
- Live Bottoms
- Silos
- Sorting Lines
- Shredders

Pumping

- PC Pumps

APPLICATION FIELD

By PROCESS

- Aggregates conveying
- Biomass drying
- Biomass gasification
- wastewater treatment
- Biosolids reduction
- Biosolids stabilization (Class A)
- BOD reduction
- Cogeneration
- Dewatering:
 - Aerobic sludge
 - Anaerobic sludge
 - Lime & Alum sludge
 - Mixed industry sludge
 - WAS sludge
- Evaporation
- Enzymatic Inactivation
- Fish processing

- Flour enhancement
- Head works
- Heat treatment
- Kelp processing
- Bulk materials Handling
- Leachate treatment
- Oil separation
- Paper sludge de-inking
- Plastics separation
- Pump station screening
- Pulp Recovery

By INDUSTRY

- Airports
- Biomass gasification
- Cement factory
- Dairy Industry
- Die Casting Industry
- Flour Mill
- Landfill
- Municipal WWTP
- Paint Factories
- Petro-chemical refinery
- Pulp & Paper industry
- Potato plant
- Rendering plant
- Slaughtering plant
- Tar Sands
- Quarries