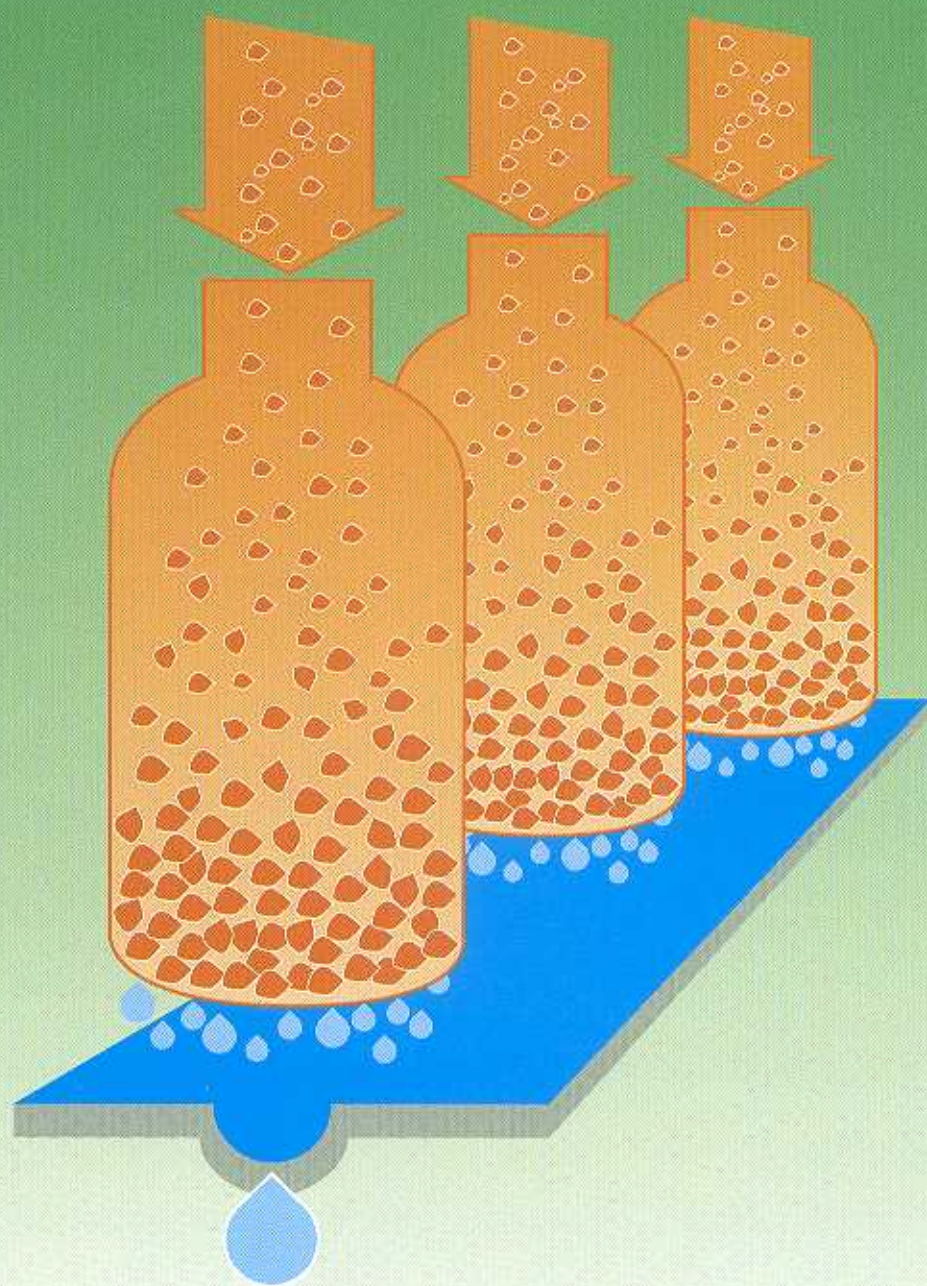


TEKNOBAG[®] DRAIMAD[®]

Sludge Dewatering



SLUDGE
Technology

The **TEKNOBAG® DRAIMAD®** system dewateres and bags sludge from water and effluent purification plants. The heart of the system is the special filtration sack made from "TNT" water repellent material.

The sacks are mounted on a special stainless steel frame, designed to give even sludge distribution.

The system is electronically controlled from a programmable control panel, ensuring correct process operation.

Dewatering and drying

After a few hours operation, dry solids contents of 15-30% can be achieved, depending on the nature of the sludge. The volume of dewatered sludge produced is dependent on the solid content of raw and dewatered sludges and, with raw sludge contents of 1% dry solids, one machine can treat up to 20 m³ per day.

After the initial dewatering stage on the machine, the sacks are sealed and removed with a special sack trolley and stored in the open. During this second phase, sludge weight

and volume continue to reduce, regardless of weather conditions.

The special water repellent material of the sacks prevents rainwater from entering but allows dehydration of the contents by evaporation.

After two months storage, a cake of 50-95% dry solids content is produced.

As an example, 1 m³ of sludge at 1% solids content would give, after two months, a cake of at least 50% dry solids content. This would weigh only 25 Kg and represents a 40-fold reduction of the original weight.

Packing

The sacks containing the dried cake act as strong containers, allowing for ease of disposal. Given the low cost of the disposable sacks and the extreme simplicity of the equipment, the **TEKNOBAG® DRAIMAD®** system reduces cake disposal costs and further improves payback times on what is, in any event, a low capital outlay.

Operating principles

Normal Operation

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

- Compactness and low space requirements.
- Sacks collars and clamps in stainless steel.
- A drainage collection tray beneath the machine.
- An internal sludge distribution system.
- Sacks positioned for easy handling.
- A specially designed sack trolley for handling the full sacks.

Automatic Operation

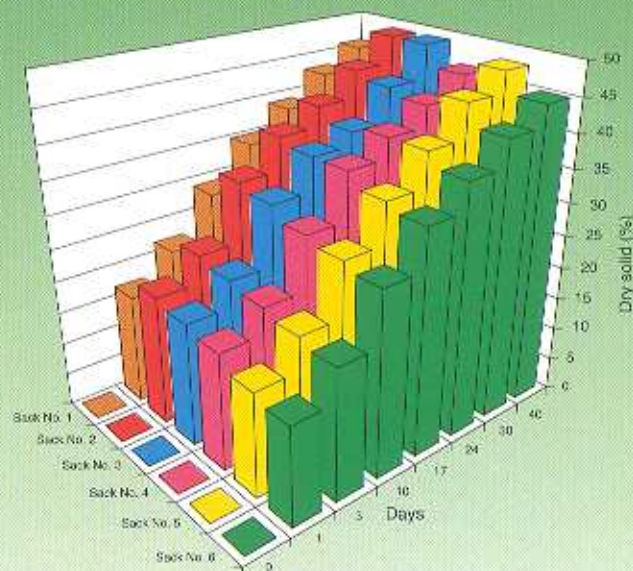
Automatic operation consists of:

- Programming to optimise filtration cycles and maximise capacity.
- The ability to alter the operating cycle to handle sludges with varying characteristics.
- Automatic operation of a sludge feed pump or valve to feed sludge to the unit as required.
- Automatic finishing of the filtration cycle when the unit is full.
- The option of extending the pressurisation phase.

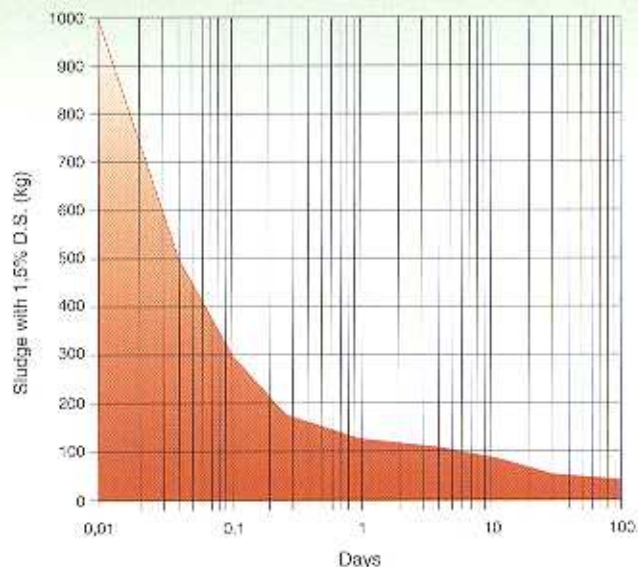
Pressure Operation

Pressurisation using low pressure air (0.2 - 0.3 bar) almost doubles the capacity of the units. The sacks are mounted in stainless steel cages designed to allow rapid sack replacement.

Increase in dry solids content in various sludge types



Water loss during dewatering and natural drying





**Sludge conditioning
with polyelectrolyte**



Draining

**Sludge dewatered
after 24 h**



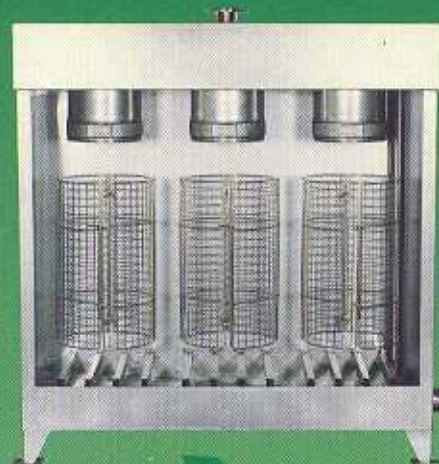
**Sludge dewatering
in open area after 30 days**



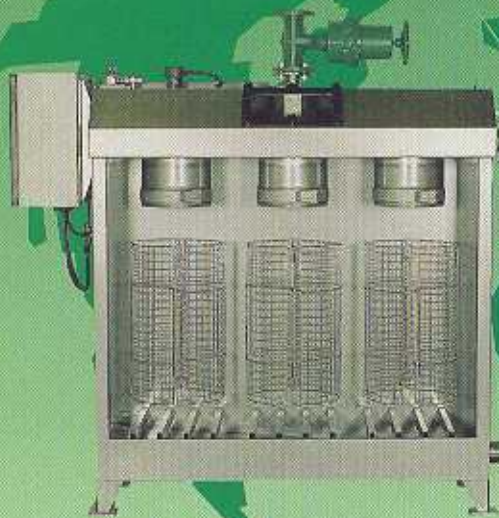
Modules TEKNOBAG® DRAIMAD®



2BM Series
2 sack (manual operation)
Dimensions (LxWxH) 1140 x 560 x 1500 mm



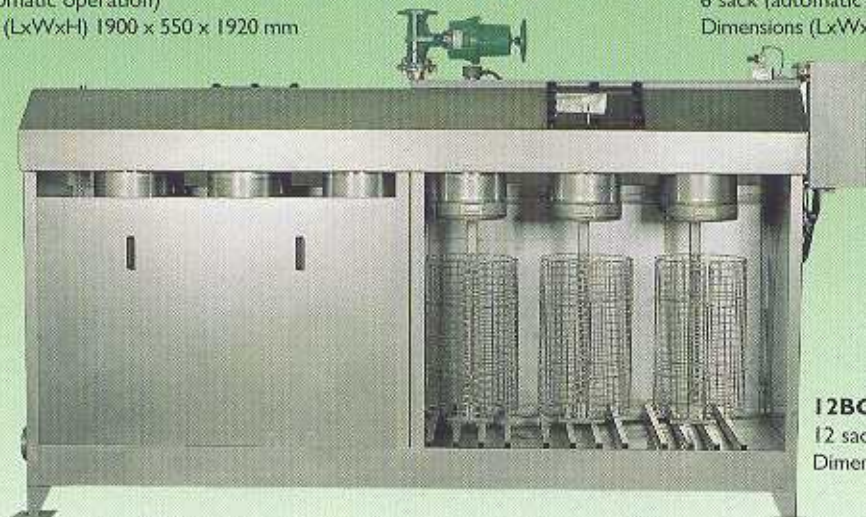
3BM Series
3 sack (manual operation)
Dimensions (LxWxH) 1550 x 550 x 1700 mm



3BCAVP Series
3 sack (automatic operation)
Dimensions (LxWxH) 1900 x 550 x 1920 mm



6BCAVP Series
6 sack (automatic operation)
Dimensions (LxWxH) 1900 x 1050 x 2000 mm



12BCAVP Series
12 sack (automatic operation)
Dimensions (LxWxH) 3350 x 1100 x 2000 mm

Our equipments are made according to CE European standard

All equipments are manufactured by Teknofanghi



Equipment for the Treatment of Sludge

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