

BRIGHT TECHNOLOGIES

Equipment and Systems continuously dewater sludges/slurries by means of Gravity Belt Filters, Belt Filter Presses or Combinations of both. Most sludges and slurries require chemical conditioning prior to using gravity and mechanical pressure to dewater.

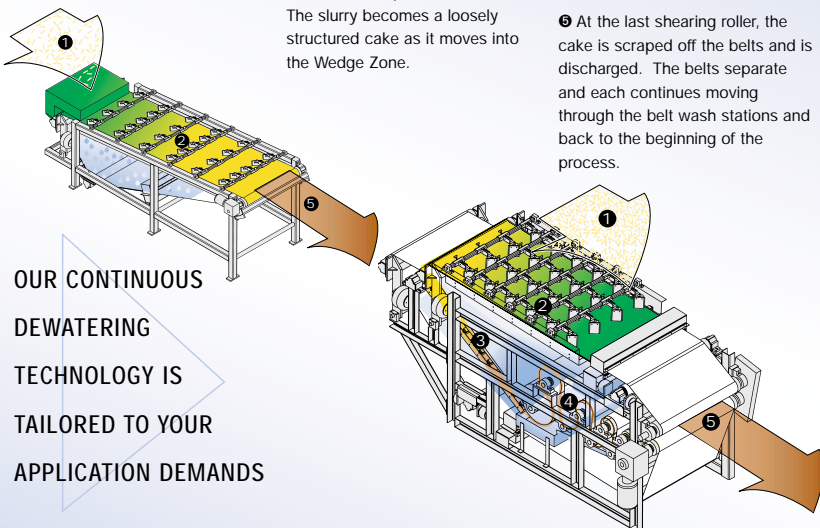
① This addition of chemical (polymer), when thoroughly mixed with the sludge, permits the agglomeration of the particles called flocculation.

② By evenly distributing the flocculated sludge onto the porous belt which moves through a series of plows and/or dams, the free liquid is removed by gravity drainage. The Belt Filter Press has two additional pressure zones. The slurry becomes a loosely structured cake as it moves into the Wedge Zone.

③ As the cake proceeds forward, the bottom belt and top belt gradually compress. This forms a wedge that applies low non-shear pressure.

④ The sandwiched belts move into the medium and high pressure zones through a combination of rollers that decrease in size. Some of these are designed to shear the cake to rearrange and expose the wetter inner cake.

⑤ At the last shearing roller, the cake is scraped off the belts and is discharged. The belts separate and each continues moving through the belt wash stations and back to the beginning of the process.



OUR CONTINUOUS DEWATERING TECHNOLOGY IS TAILORED TO YOUR APPLICATION DEMANDS

TYPICAL APPLICATIONS

Type of Waste Stream	Avg. Feed % Dry Solids (DS)	(GBT) GRAVITY BELT THICKENER		(BFP) BELT FILTER PRESS	
		Avg. Capacity (per meter of belt width) (GPM)	Avg. Thickened Sludge % Dry Solids (DS)	Avg. Capacity (per meter of belt width) (GPM)	Avg. Dewatered Cake % Dry Solids (DS)
MUNICIPAL					
Primary 100%	2 - 6	300 - 350	7 - 12	80 - 120	26 - 38
Anaerobic Digested	2 - 5	200 - 300	5 - 10	60 - 100	18 - 26
Aerobic Digested	0.5 - 2	150 - 225	5 - 10	50 - 90	12 - 20
Waste Activated	0.5 - 2	175 - 250	5 - 10	55 - 95	16 - 24
PULP & PAPER					
Primary 100% (Pulp & Paper)	2 - 4	300 - 350	7 - 12	80 - 120	38 - 45
Secondary 100%	1.5 - 3	175 - 250	5 - 10	40 - 80	16 - 25
INDUSTRIAL					
Aggregate	2 - 25	200 - 300	40 - 50	80 - 120	70 - 80
Septage	2 - 4	200 - 250	5 - 10	60 - 100	30 - 35
Grease Trap	3 - 5	300 - 350	7 - 12	80 - 120	40 - 45



System Solutions

... self-contained, simple, efficient & economical for a full range of applications

BRIGHT TECHNOLOGIES common sense engineered systems are available as individual components, pre-packaged on self supporting skids or trailer mounted for quick portable operation. In working together we can assemble the right combination of equipment using our experience and knowledge for the most cost-effective solution for your application.

We bring together a complete system if it is required and/or will use existing customer supplied equipment as part of the complete package. We guarantee the entire system, provide training and service all equipment within your system. Should the need arise we have dewatering systems available for rental and can also arrange long term lease packages.



- Complete pre-engineered system for your application
- Reduces space requirements and installation cost
- Easily transportable, quick to setup
- Single source responsibility



- Trailers from 16' - 53', flatbed, curtain sided and totally enclosed
- Service several sites with one system
- Easily transportable, quick to setup

OTHER SERVICES AND EQUIPMENT

- Delivery, installation & training
- Equipment refurbishing and updating
- Free lab testing
- Parts & Service for all makes of waste treatment equipment
- Used Equipment
- On-site demonstrations
- Rentals and leasing

127 N. WATER STREET
HOPKINS, MICHIGAN, 49328

PH: 616/793-7183 ■ FX: 616/672-7375

TOLLFREE: 800/253-0532

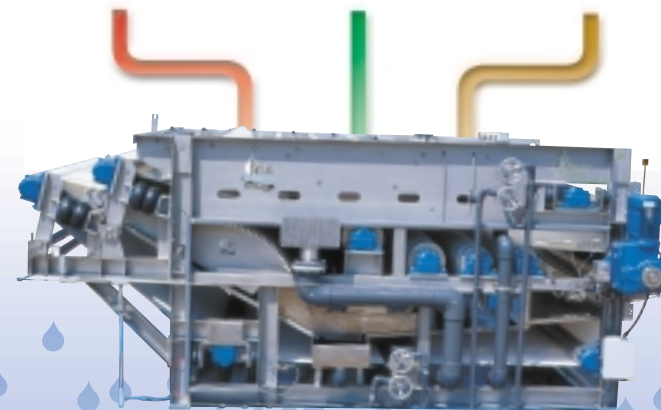


DEWATERING SOLUTIONS

AGGREGATE
BIOLOGICAL
CHEMICAL
FOOD PROCESSING

GREASE TRAP
INDUSTRIAL
LIVESTOCK
MEAT PROCESSING

MUNICIPAL
PULP & PAPER
SEPTAGE
...PLUS MANY OTHERS



EQUIPMENT, SYSTEMS & SERVICE

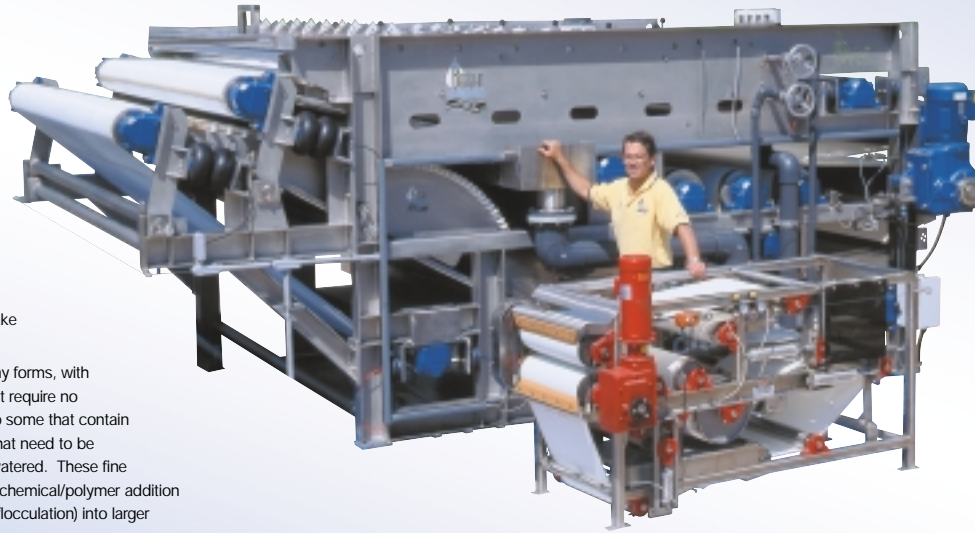
1-800-253-0532

bright@wmis.net



Tailored Cost Effective Solutions For Thickening and Dewatering With Maximum Volume Reduction

**100% PROCESS GUARANTEE
3 YEAR WARRANTY**



BRIGHT TECHNOLOGIES

tailored dewatering systems assures you of the right equipment, with time/pressure profiles designed to meet the application, to maximize performance, reducing the cake solids to be handled.

Sludges/slurries come in many forms, with some being course solids that require no chemical/polymer addition, to some that contain fine and/or dissolved solids that need to be captured, separated and dewatered. These fine sludges/slurries will require a chemical/polymer addition to pull these solids together (flocculation) into larger particles for dewatering.

Quality, Capacity, Low Operating Costs and Long Service Life are more than just words. It comes from our knowledge of your application, experience of applying the proper time/pressure profile, and reliability of highest quality construction materials for the best price value with no shortcuts.

BRIGHT TECHNOLOGIES broad range of experience and knowledge gives you the assurance of equipment and systems that are built to last. While others may use stainless steel only when it comes in contact with the sludge and/or slurry and not taking in consideration of the processing environment. At Bright technologies, we use stainless steel completely in manufacturing of our equipment as standard. Components used have been tested in several applications for reliable trouble-free service. Quality components combine with the best overall efficient design, is why Bright Technologies is the most cost-effective equipment available.

Very seldom are two applications identical, Bright Technologies believes in taking an individual approach to your dewatering application.

Using our 5-Step Plan, we work together, collectively finding process solutions that go beyond the scope of your original objectives, resulting in the most cost efficient process solution.

Bright Technologies, complete line of liquid/solid separation and dewatering equipment leaves absolutely no room for compromise. You get exactly the right equipment required to do the job right the first time.

Gravity Belt Thickeners available in sizes ranging from 0.8 meter to 3.2 meters in width.

Belt Filter Presses available in sizes ranging from 0.3 meter to 3.2 meters in width.

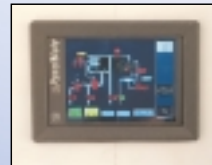
Thickener/Belt Filter Combinations available with all press systems.

STANDARD FEATURES



- Frame – 304 Stainless Steel
- Rolls – 304 Stainless Steel
- Pans – 304 Stainless Steel
- Heavy Duty Bearings
- Maximum Belt Wrap
- Pneumatic Belt Tension and Tracking
- Dual Press Belt Drive Rolls

LEADING EDGE CONTROLS

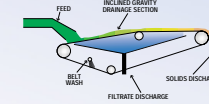


- Touch Screen Operator Controls
- Simple Adjustments
- Effective Operation History
- Efficient Running Indication
- Easy System Integration

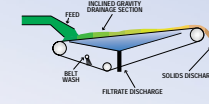
AUXILIARY COMPONENTS



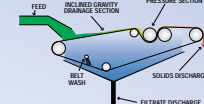
- Electrical Systems Control Panel
- Sludge Feed Pump
- In-Line Grinder
- Polymer Feed/Blend System
- Conveyors



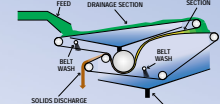
CPGBT
(Compact Gravity Belt Thickener) profile is used for thickening of sludges/slurries with flows of 150 gpm or less. Can be enclosed, skid and/or trailer mounted.



GBT
(Standard Gravity Belt Thickener) profile is used for thickening of all sludges/slurries with flows of 150 gpm and greater. Can be enclosed, skid and/or trailer mounted.

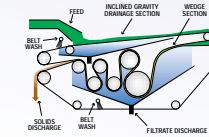


"S" Series
(Single Belt Filter Press) profile is used for thickening and dewatering of sludges/slurries just enough to pass the paint filter test and reduce the total volume to be handled. Can be enclosed, skid and/or trailer mounted.

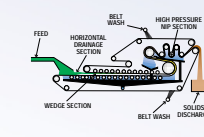


"W" Series
(Wedge Belt Filter Press) profile is used for delicate dewatering over a wide range of applications with constant pressure control along with shear free pressure applied to difficult-to-dewater product flows.

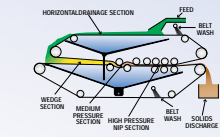
**YOUR APPLICATION
DETERMINES THE RIGHT
APPROACH TO AN
EFFICIENT CONTINUOUS
OPERATING SYSTEM**



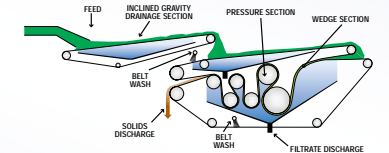
"P" Series
(Belt Filter Press) profile is used for delicate dewatering over a wide range of applications, such as municipal sludge with low feed solids, utilizing increased filtration area, for low polymer consumption and high cake solids.



"H" Series
(Belt Filter Press) profile is tailored for high solids in the incoming product stream and fibrous products which require a very short drainage time, increased shear pressure is used for maximum cake dryness.



"HP" Series
(Belt Filter Press) profile is used for product streams that are not pressure sensitive and can accept nip line pressure without extruding.



"GBS" Series
(Combination) profile is used for low solids/high flow product streams that will benefit from down sizing the belt filter press to handle only the solids flow and not the hydraulic loadings.