## **STATE OF THE ART CONTROLS**

- **NEMA 4X control Enclosures Standard**
- All external devices are 24 VDC for Operator Safety
- Allen Bradley PLC w/modem, Touch Screen, VFD's, BFP HMI and Motor starters
- Modem and Ethernet included for support by factory technicians •
- VFD's are controlled via an expandable serial network •
- Alarm history standard (review of past alarms with time/date stamp via touch screen)
- Message history standard (review of past 128 operator adjustments with time/date stamp via touch • screen
- Alarm and system timers are adjustable by the operator via the touch screen and belt press mounted • remote
- Auto/Manual selection of all ancillary equipment by operator (each piece can be started individually • for maintenance
- Easily expandable control system (The PLC and Touch screen can be programmed to control more ancillary equipment without adding push buttons, pilot lights, etc)
- Hour meters for all equipment built into controls for maintenance purposes
- Belt press mounted operators station (a monochrome HMI on the belt press allows the operator view the gravity deck and make all necessary adjustments to the system. The main touch screen could be removed and the system can still be operated at the belt press.
- Belt speed in FPM and Percent of Maximum
- Sludge Flow in G.P.M. and Gallons Processed and Reset-able Gallons Processed on the touch screen with an Optional Flow Meter







STAINLESS STEEL CONSTRUCTION

304 Stainless Steel Frame and Roll construction is standard on all Bright Technologies Belt Filter Presses.

**GRAVITY SECTION** 



#### MAIN TOUCH SCREEN



RESUME

PAUSE

20

#### **BELT PRESS MOUNTED HMI**

600

SLUDGE

PUMP

ALARM

SILENCE

**RADIUS WEDGE** SECTION

The Inclined Gravity Deck features fully adjustable plow assemblies and 1/2" UHMW support bars on 2" centers designed to maximize drainage by breaking surface tension and maximizing capillary action. The moving belts in contact with the support bars break the water surface tension allowing it to flow through the pores in the belt. As the water travels through the belt it creates a vacuum effect on the top side of the belt, thereby pulling in more water. This principle is the same as the effect of touching the roof of a wet tent. The surface tension of the water keeps the water droplets from penetrating the tent until something touches the material and then it will leak at the contact point. Since the contact bars are spaced closer than many of those of our competitors our gravity decks are more effective for any given belt area.

The patented radius wedge section brings the sludge into contact with both belts sooner than in a typical straight wedge section. This results in application of applying pressure to the sludge over a greater area than a straight wedge. The large radius of the wedge simulates a large diameter roll as well as promoting superior drainage by breaking lower belt surface tension on 2" centers. Unlike a straight wedge, this system does not require any user adjustments.

### 800-253-0532 www.brightbeltpress.com

#### 269.793.7183 www.brightbeltpress.com

# DEWATERING **SYSTEM FEATURES**

### **Bright BFP Features**

# **Bright Ancillary Equipment**

SLUDGE FEED	INCLINED GRAVITY ZONE		RADIUS WEDGE ZONE		
				SLUDGE PUMP	We offer rotary lobe sludge than progressive cavity pum period. Rotary Lobe Pumps Unlike many pumps they ca accomplished in most case disconnecting the piping.
				SLUDGE MIXING VALVE	We use a pneumatically mixing. The valve is the fu orifice gets smaller as air exposed to the sludge or for removing debris.
HIGH PRESSURE ZONE		minimum of eight pressure uses in roll diameter, which a lge cake.		AIR COMPRESSOR	Our systems use only 4 CFI A quality industrial air comp
PNEUMATIC BELLOWS	assemblies that are not frustration with pneumat up" from corrosion as ma	steering is accomplished t subject to "freeze up" du tic cylinders. These bellows ay happen with pneumatic c no concern of a leaking hyd	e to corrosion that cause are not subject to "freeze cylinders. Further, with the	POLYMER SYSTEM	We manufacture our ow systems feature dilution off, built in water pressure the sludge line is standard
STEERING SENSORS	utilizes stainless steel sensors are connected t	omplished by a patented be proximity sensors that are to the PLC which controls p ronment inside a NEMA 4X	e easily adjustable. These pneumatic valves that are	SLUDGE FLOW METER	With our flow meters, you ca screen or belt press mount touch screen in a reset-able
	Belt Steering, Belt Off Teasily replaced.	Track, and Belt Breakage a	are identical and can be	STAINLESS STEEL CONVEYORS	Our modular sludge cake con utilize a 2 foot drive sectior
DRAINAGE ROLLER	Our patented first pressure roll is a large diameter fabricated roll that features 50% open area drainage for both the upper and lower belts. Unlike perforated rolls (30- 35% open area), our patented Wing Roller channels water to the outside of the roll as the roll rotates upward and washes the majority of the solids present out of the roll so that they do not impede drainage in subsequent				conveyor sections are const rugged frame. Our typical 18 box or small dump truck. C belly pans.
	unlike perforated rolls w	Il is also easy to clean at the hich can stubbornly retain so ewatering capacity and odor	olids buildup inside the roll		BRIG 127 HC
	260	702 71 92			www



ge pumps which are very compact and easier to service umps. Rotary lobe pumps can also operate dry for a longer tops can also operate equally well in either flow direction. can also operate at 25 feet of suction lift. Repair is easily ses by removing a cover and replacing the lobes without

y controlled variable orifice valve for sludge-polymer e full sludge pipe size until air pressure is applied. The air pressure rises. There are no shafts or metal parts or to plug up the valve. No inspection plate is needed

FM Max. Our Air Compressors are cast iron construction. npressor, with a 30 Gallon Receiver Tank.

own polymer feed and blend systems. Our polymer n water flow control, dilution water low pressure shut re regulators and four port injection of the polymer into ard.

can tell the sludge flow in GPM at any time from our touch inted remote. Total gallons processed are available on the ole and non reset-able form.

conveyors offer a variety of conveyor lengths. Our conveyors ion with 10 foot and 6 foot interchangeable sections. These astructed with 2" by 10" formed channel to provide a very 18" wide by 22 foot long conveyor can easily load a roll off Other conveyor options include stainless steel covers and

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