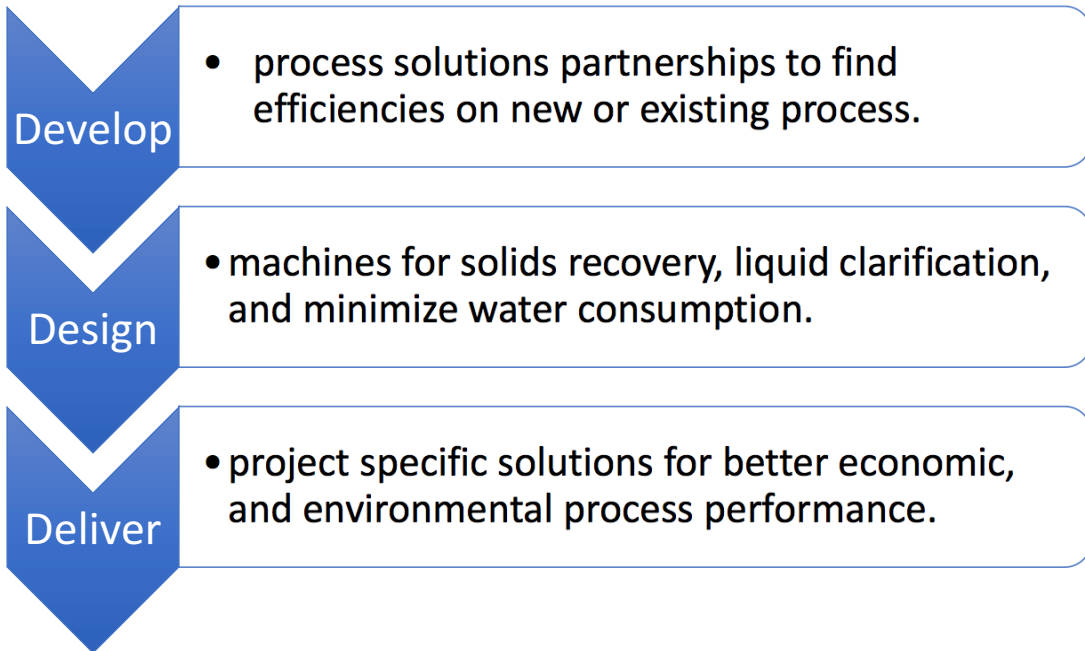


### Industrial and Municipal Process Equipment Packages



Doc# BELT PRESS-1703-R00

# BELT PRESS

## PN – Mechanical Dewatering

Capacity up to 484 GPM 110 m<sup>3</sup>/h

### MANUFACTURE

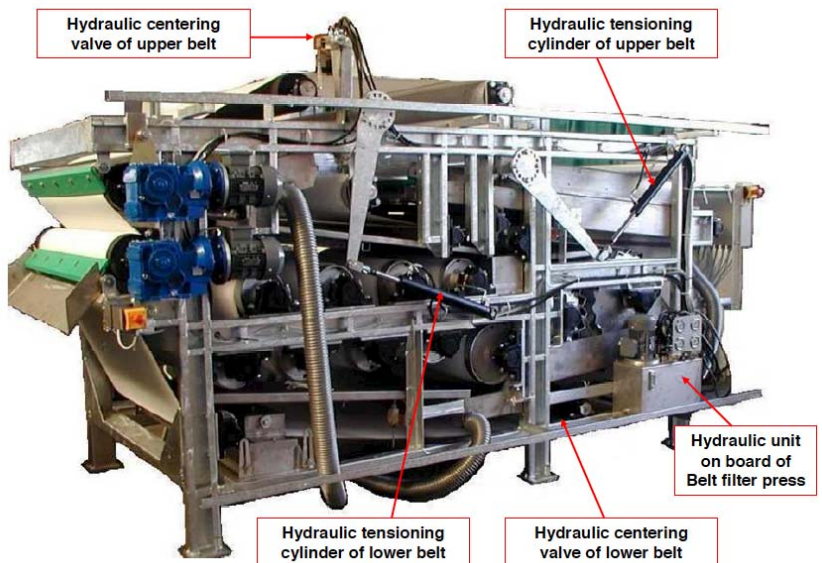
**DRYCAKE**'s technical department is able to develop all the required design activities from feasibility to as-built. Process Validation can be validated using our lab or on-site pilot services.

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.

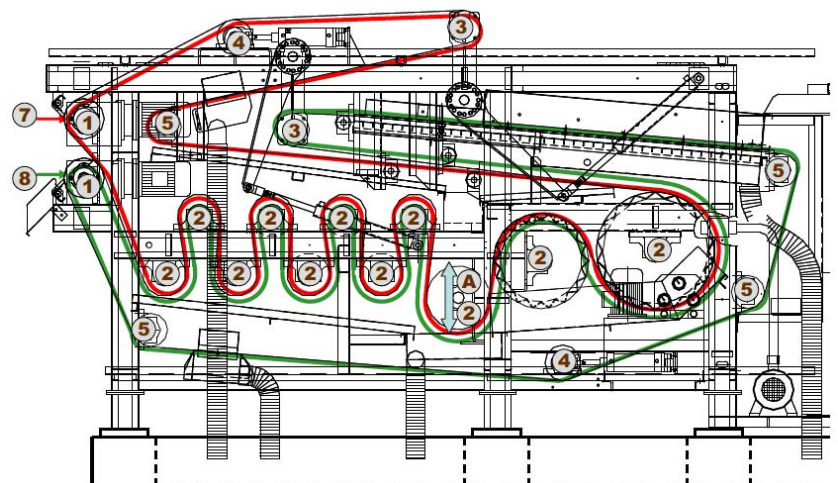


### OPERATION

**DRYCAKE Belt Filter Press** can dehydrate organic and inorganic sludge.

The progressive dehydration based on three levels: dripping area, wedge area, pressing area with 7 to 11 rollers.

Moreover they are able to assure high dehydration performances and easy maintenance.



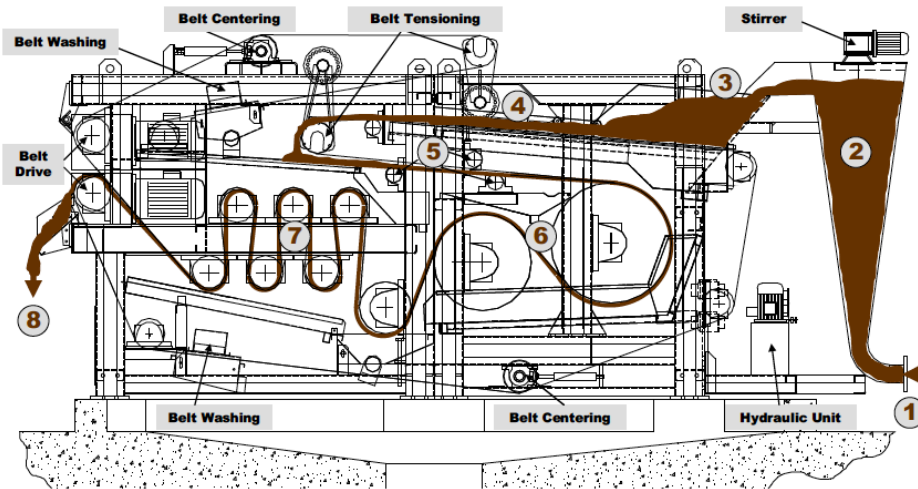
## FEATURES

- ✓ Automatic Operation
- ✓ High Quality Construction
- ✓ Low energy consumption
- ✓ Low polymer Consumption
- ✓ 7 to 11 High Pressure Rollers
- ✓ Hydraulic belt tensioning and centering system
- ✓ Belt washing pump integrated
- ✓ Self cleaning nozzles
- ✓ Belts drive unit with control by VFD
- ✓ Sludge inlet by reactor cylinder or conical reactor or distribution reactor tank

With his high performances, the **DRYCAKE Belt Filter Press** is the perfect solution for your dewatering needs



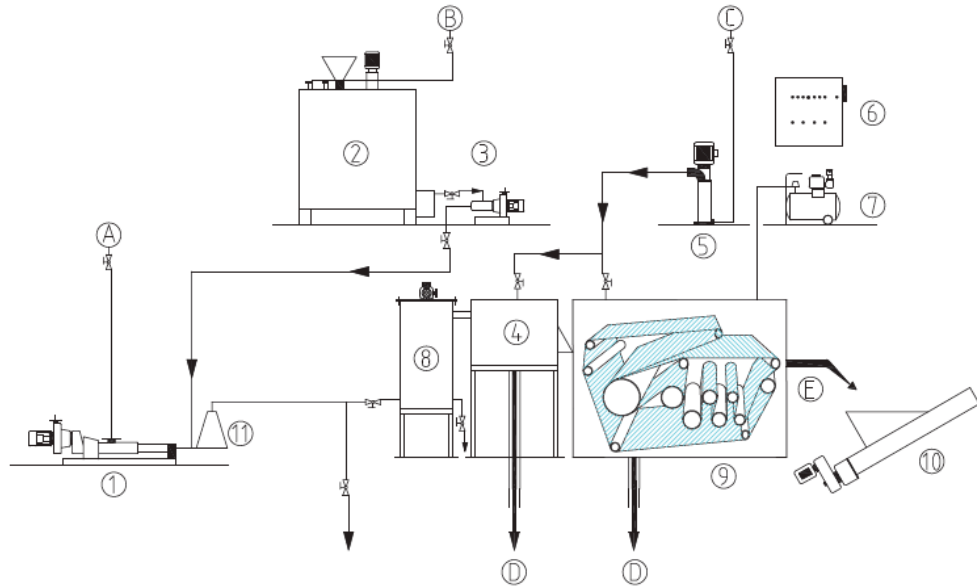
### MODEL & DIMENSION



#	Operation
1	Sludge Inlet
2	Conical Reactor
3	Distribution tank
4	Dewatering area (ploughs)
5	Wedge Area
6	Soft pressing area
7	Hard pressing area
8	Sludge Discharge

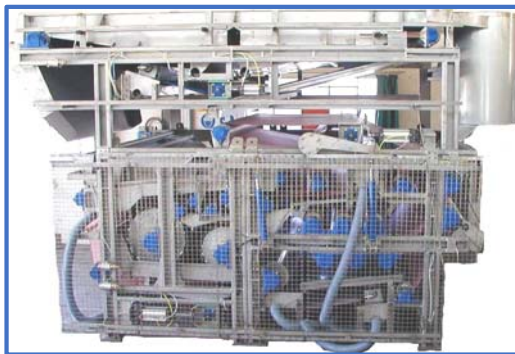
Model	Capacity		Belt Width		Belt Wash water		Belt Filter Press Power		Wash pump Power		Empty Weight	
	m3/h	GPM	mm	in	m3/h2	GPM3	kW	HP	kW4	HP5	kg	lbs
PN50	3 to 9	13 to 40	600	24	5	20	2.6	3.5	4	5.4	3,000	6,614
PN80	5 to 12	22 to 53	900	35	6	27	2.6	3.5	4	5.4	3,400	7,496
PN100	6 to 14	26 to 62	1,100	43	8	36	3.3	4.4	5.5	7.4	4,000	8,818
PN120	8 to 16	35 to 70	1,300	51	10	43	3.3	4.4	5.5	7.4	4,500	9,921
PN150	10 to 19	44 to 84	1,600	63	12	52	4.1	5.5	7.5	10.1	5,000	11,023
PN170	11 to 21	48 to 92	1,800	71	14	59	4.1	5.5	7.5	10.1	5,400	11,905
PN200	14 to 24	62 to 106	2,100	83	16	72	5.7	7.6	11	14.7	8,000	17,637
PN220	15 to 26	66 to 114	2,300	91	18	81	5.7	7.6	11	14.7	9,000	19,842
PN250	16 to 30	70 to 132	2,600	102	20	88	5.7	7.6	11	14.7	10,000	22,046
PN270	18 to 32	79 to 141	2,800	110	22	96	7.3	9.8	13.5	18.1	11,500	25,353
PN300	20 to 36	88 to 158	3,100	122	25	108	7.3	9.8	13.5	18.1	13,000	28,660

### PROCESS & INSTRUMENTATION

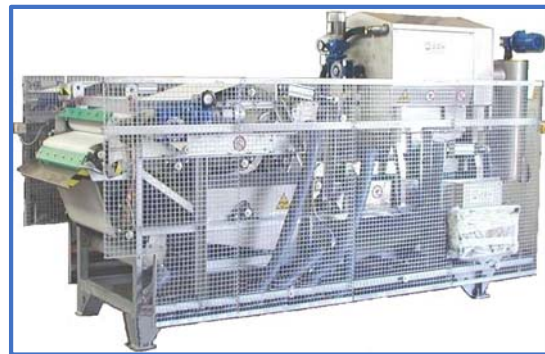


- |                             |                                  |                               |
|-----------------------------|----------------------------------|-------------------------------|
| 1 - SLUDGE PUMP             | 6 - SWITCHBOARD                  | A - SLUDGE LINE               |
| 2 - POLYMER STATION         | 7 - AIR COMPRESSOR (if required) | B - WATER LINE                |
| 3 - POLY DOSING PUMP        | 8 - REACTOR CYLINDER             | C - WASH WATER LINE           |
| 4 - THICKENER (if required) | 9 - BELT FILTER PRESS            | D - FILTRATE-WASHWATER OUTLET |
| 5 - BELT WASHING PUMP       | 10 - SLUDGE CONVEYOR             | E - SLUDGE OUTLET             |
|                             | 11 - STATIC MIXER (if required)  |                               |

In case of sludge low in solid (<1%DS) the cascade configuration allows a pre-thickening by a Belt thickener or a Drum thickener installed on the top of the Belt Press.



*Cascade: belt thickener-belt filter press*



*Cascade: drum thickener-belt filter press*

## 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