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.

Doc# BELT PRESS-1703-R00
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.
BELT PRESS
PN – Mechanical Dewatering

Capacity up to 484 GPM 110 m³/h

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

DRYCAKE
projects@drycake.com
Belt press
PN – Mechanical Dewatering

Model & Dimension

<table>
<thead>
<tr>
<th>#</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sludge Inlet</td>
</tr>
<tr>
<td>2</td>
<td>Conical Reactor</td>
</tr>
<tr>
<td>3</td>
<td>Distribution tank</td>
</tr>
<tr>
<td>4</td>
<td>Dewatering area (ploughs)</td>
</tr>
<tr>
<td>5</td>
<td>Wedge Area</td>
</tr>
<tr>
<td>6</td>
<td>Soft pressing area</td>
</tr>
<tr>
<td>7</td>
<td>Hard pressing area</td>
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<tr>
<td>8</td>
<td>Sludge Discharge</td>
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</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity m3/h</th>
<th>GPM</th>
<th>Belt Width mm</th>
<th>Belt Wash water m3/h2</th>
<th>Belt Filter Press Power kW</th>
<th>HP</th>
<th>Wash pump Power kW4</th>
<th>HP5</th>
<th>Empty Weight kg</th>
<th>lbs</th>
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<tbody>
<tr>
<td>PN50</td>
<td>3 to 9</td>
<td>13 to 40</td>
<td>600</td>
<td>24</td>
<td>5</td>
<td>20</td>
<td>2.6</td>
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<td>900</td>
<td>35</td>
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<td>27</td>
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<td>26 to 62</td>
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<td>8</td>
<td>36</td>
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<td>51</td>
<td>10</td>
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<td>63</td>
<td>12</td>
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<td>108</td>
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<td>13.5</td>
<td>18.1</td>
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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.
Process Solutions for a Better World

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

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