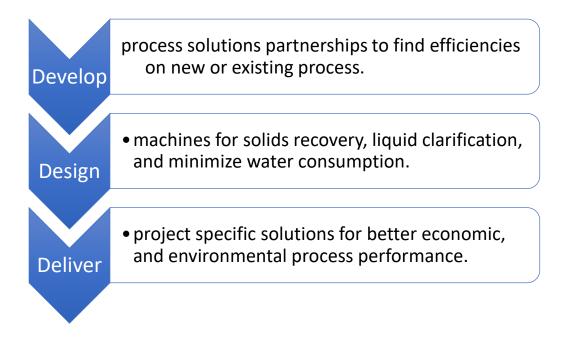




Industrial and Municipal Process Equipment Packages







Doc# PERFODRUM-1703-R01



PERFODRUM

DRD - Fine Screening

Capacity up to 41 MGD 6

6,500 m3/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

The **PERFODRUM** series is a high capacity rotating drum screen. The screen is composed of a wedge wire drum screen with stationary brushes and washing system, a screw conveyor, with washing system, a compaction zone and a vertical discharge chute.

The drum retains solids as the liquid passes them. The solids clog the holes and cause a rise in the level of the effluent causing a differential between the level of the upstream and downstream. Generally, a sensor, detects the increase in absolute or differential water level, provides the drum and auger start signal. The auger transports the screenings from the drum to the solids discharge The drum rotation causes a clean section of the drum to be immersed in the effluent, and roller brushes and jet washing clean the perforations.



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FEATURES

- ✓ Automatic Operation
- ✓ Fully customizable to customer needs
- ✓ No submerged mechanical components
- ✓ No bearings
- ✓ Completely free screen area:
 - No rotating arm in lower part of the drum
 - No solids obstruction
 - o Low headloss
- ✓ Independent operation of Screw and Drum:
 - Screw for solids conveyance and compaction
 - Drum rotates only to clean the perforation
 - Higher solids extraction capacity
- ✓ Manufactured in Stainless Steel AISI 304 and 316(L)
- ✓ Welding pickled and passivated
- ✓ Easy removable covers for hygienic inspection
- ✓ Odour-containing covers
- ✓ Low and easy maintenance

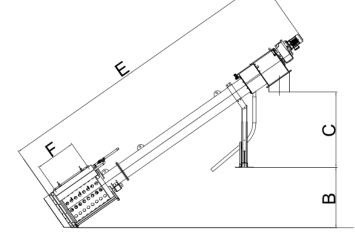
PERFODRUM DRD-C IN CUSTOM STAINLESS STEEL CHANNEL Reduction of volume and weight of 40-60% Dryness 25-35%DS

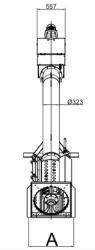


PERFODRUM

DRD - Fine Screening

MODEL & DIMENSION





| 35° installation IN CHANNEL | A | | В | | с | | E | | F | |
|--------------------------------|-------|-----|-------|-----|-------|----|--------|-----|-------|-----|
| PERFODRUM MODEL | mm | in | mm | in | mm | in | mm | in | mm | in |
| DRD-2M-C 1000 | 1,000 | 39 | 1,200 | 47 | 1,600 | 63 | 5,800 | 228 | 1,000 | 39 |
| DRD-2M-C 1200 | 1,200 | 47 | 1,400 | 55 | 1,600 | 63 | 6,800 | 268 | 1,200 | 47 |
| DRD-2M-C 1400 | 1,400 | 55 | 1,600 | 63 | 1,600 | 63 | 7,300 | 287 | 1,400 | 55 |
| DRD-2M-C 1600 | 1,600 | 63 | 1,900 | 75 | 1,600 | 63 | 7,600 | 299 | 1,600 | 63 |
| DRD-2M-C 1800 | 1,800 | 71 | 2,100 | 83 | 1,600 | 63 | 8,000 | 315 | 1,800 | 71 |
| DRD-2M-C 2000 | 2,000 | 79 | 2,400 | 94 | 1,600 | 63 | 8,500 | 335 | 2,000 | 79 |
| DRD-2M-C 2400 | 2,400 | 94 | 2,600 | 102 | 2,000 | 79 | 9,000 | 354 | 2,200 | 87 |
| DRD-2M-C 2600 | 2,600 | 102 | 3,100 | 122 | 2,100 | 83 | 10,100 | 398 | 2,600 | 102 |

| PERFODRUM CAPACITY * | Perfora 2 m | | Perfora 3 m | | Perforations 6 mm | | |
|-------------------------|----------------|-------|----------------|-------|----------------------|-------|--|
| MODEL | L/s | MGD | L/s | MGD | L/s | MGD | |
| DRD-2M-C 1000 | 104 | 2.37 | 111 | 2.53 | 207 | 4.72 | |
| DRD-2M-C 1200 | 149 | 3.40 | 158 | 3.61 | 274 | 6.25 | |
| DRD-2M-C 1400 | 214 | 4.88 | 291 | 6.64 | 399 | 9.11 | |
| DRD-2M-C 1600 | 280 | 6.39 | 412 | 9.40 | 575 | 13.12 | |
| DRD-2M-C 1800 | 431 | 9.84 | 534 | 12.19 | 678 | 15.48 | |
| DRD-2M-C 2000 | 530 | 12.10 | 799 | 18.24 | 958 | 21.87 | |
| DRD-2M-C 2400 | 899 | 20.52 | 1,107 | 25.27 | 1,401 | 31.98 | |
| DRD-2M-C 2600 | 1,020 | 23.28 | 1,399 | 31.93 | 1,799 | 41.06 | |



* Contact DRYCAKE for capacity at different perforations and drum diameter.



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

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- Municipal WWTP
- Paint Factories
- Petro-chemical refinery
 - Pulp & Paper industry
- Potato plant
- Rendering plant
- Slaughtering plant
- Tar Sands
- Quarries