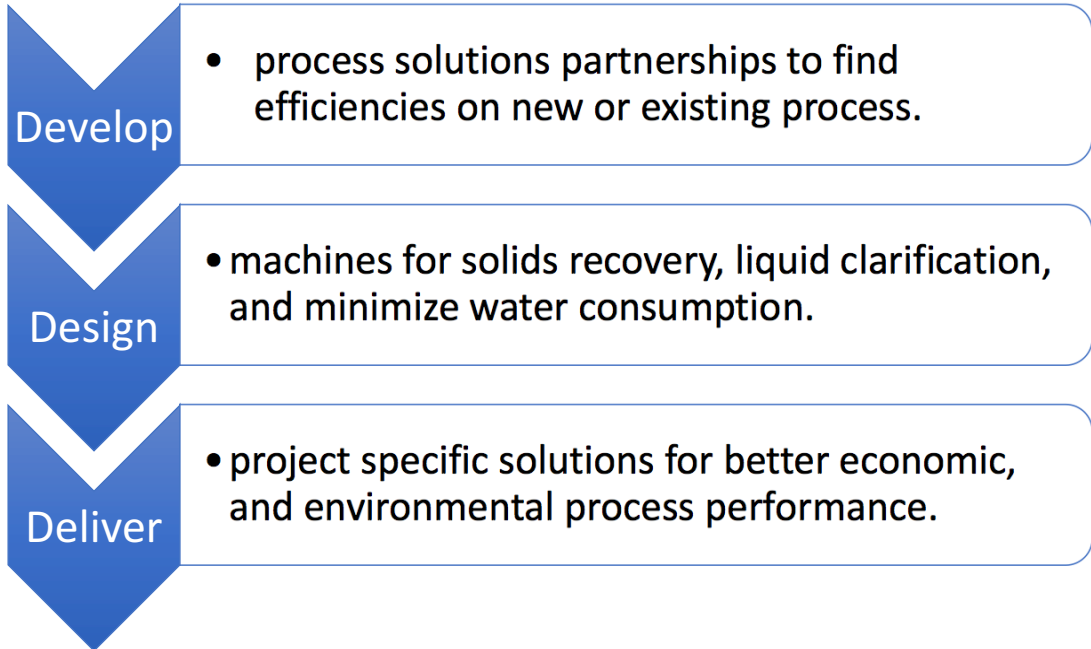


### Industrial and Municipal Process Equipment Packages



Doc# PERFODRUM-1703-R01

## 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 screen and screw conveyor are independently (**DRD-2M**) driven by means of their own gear-motor. This version is particularly recommended when, into the waste water is present a large amount of solid waste to be filtered. The double motorization guarantees the independence of the two rotary elements of the machine (screw and sieve) and consequently a greater reliability and sturdiness of the entire system

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.

**PERFODRUM IN CHANNEL  
DOUBLE MOTOR  
DRD-2M-C**



**OTHER OPTION  
PERFODRUM IN TANK  
DOUBLE MOTOR  
DRD-2M-T**

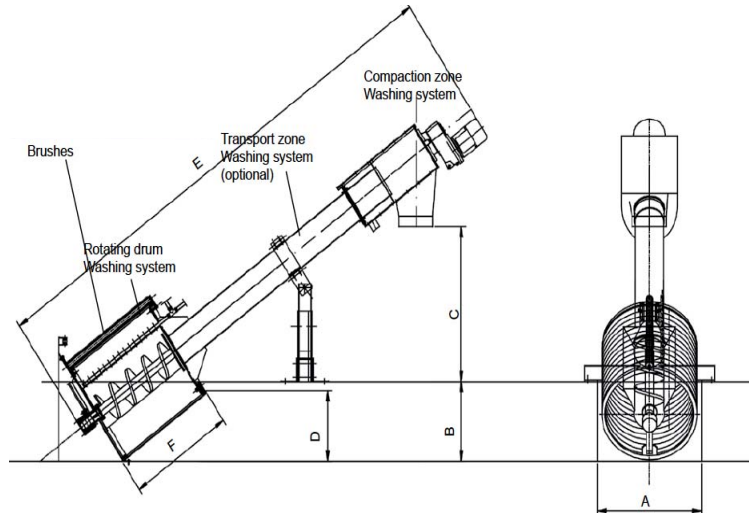
## FEATURES

- ✓ 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
  - 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

Reduction of volume  
and weight of 40-60%  
Dryness 25-35%DS



### MODEL & DIMENSION



35° installation IN CHANNEL PERFODRUM MODEL	A		B		C		D		E		F	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
DRD-2M-C 1000	1,000	39	1,200	47	1,600	63	770	30	5,800	228	1,000	39
DRD-2M-C 1200	1,200	47	1,400	55	1,600	63	930	37	6,800	268	1,200	47
DRD-2M-C 1400	1,400	55	1,600	63	1,600	63	1,050	41	7,300	287	1,400	55
DRD-2M-C 1600	1,600	63	1,900	75	1,600	63	1,200	47	7,600	299	1,600	63
DRD-2M-C 1800	1,800	71	2,100	83	1,600	63	400	16	8,000	315	1,800	71
DRD-2M-C 2000	2,000	79	2,400	94	1,600	63	1,550	61	8,500	335	2,000	79
DRD-2M-C 2400	2,400	94	2,600	102	2,000	79	1,700	67	9,000	354	2,200	87
DRD-2M-C 2600	2,600	102	3,100	122	2,100	83	2,000	79	10,100	398	2,600	102

PERFODRUM CAPACITY *	Perforations 2 mm		Perforations 3 mm		Perforations 6 mm	
	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.

## 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