

DBS-P - Fine Screening

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# PERFOPLATE-1703-R02

DRYCAKE projects@drycake.com



DBS-P - Fine Screening

Capacity up to 228 MGD

36,000 m3/day

MANUFACTURE

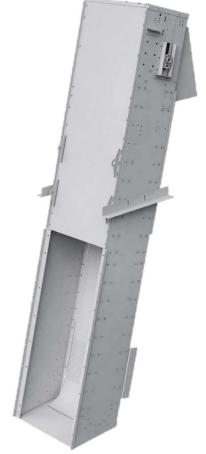
DRYCAKE's technical department is able to develop all the required design activities from feasibility to as-built. Process Validation can be validated using our lab or on-site pilot services.

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 **PERFOPLATE** comes from years of experience in the field of mechanical pre-treatment of wastewater. The equipment is for solid separation (of variable size as a function of the screen plate perforations from 2 to 10mm).

The operation is automatic. The screen plate form the screening area, and solids accumulate at the screen base until a water height level sensor activates the rake mechanism to clear the perforations. The brush is designed to clean the perforations and transport the screening to the top of the **PERFOPLATE** where a rake plate ensures the screenings drop into the discharge chute. The brush are fixed and chain driven, with the number of brush growing with the screen height.

A gear-motor actuates the brush mechanism transmission.





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FEATURES

- ✓ Automatic Operation
- ✓ Easy installation in channel
- ✓ Fully customizable to customer needs
- ✓ Heavy Duty Application
- √ No submerged mechanical components
- √ 75° Installation angle standard. 80 & 90° installation angles available in special execution
- ✓ 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









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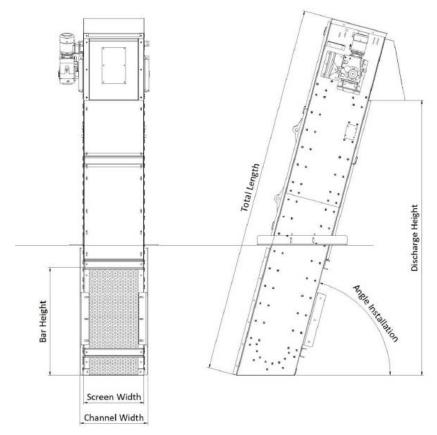
MODEL & DIMENSION

75° installation	Channel width		Total length		Discharge height from channel bottom		Screen width		Screen height	
MODEL	in	mm	in	mm	in	mm	in	mm	in	mm
DBS-P400	16	400	132	3350	91	2300	15	370	31	800
DBS-P600	24	600	132	3350	91	2300	22	570	31	800
DBS-P800	31	800	132	3350	91	2300	30	770	31	800
DBS-P1000	39	1000	140	3550	98	2500	38	970	39	1000
DBS-P1200	47	1200	140	3550	98	2500	46	1170	39	1000
DBS1400	55	1400	140	3550	98	2500	53	1340	39	1000
DBS1600	63	1600	140	3550	98	2500	61	1540	39	1000
DBS1800	71	1800	140	3550	98	2500	69	1740	39	1000
DBS-P2000	79	2000	159	4050	118	3000	76	1940	59	1500

* Other configuration available on demand

NUMBER OF BRUSH [2-6]: 2 brush standard plus one for every 3 feet in height to a maximum of 6.

ANGLE OF INSTALLATION: 75° Installation angle standard. 80 & 90° installation angles available in special execution.



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MANUFACTURING QUALITY

CHAIN TENSIONING

 Heavy duty screw to adjust headshaft to tighten chain.

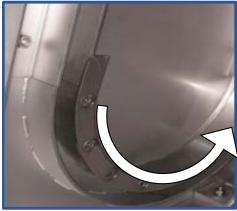
CHAIN GUID

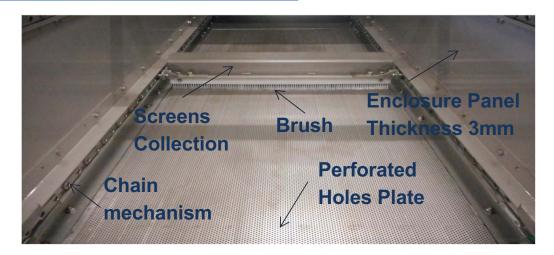
- The PERFOPLATE chain guides replace lower sprockets.
- No submerged sprockets eliminates the need for the operator to perform maintenance in the channel.
- ✓ The PERFOPLATE chain guides are manufactured in AISI316L with UHMW Protection

MULTIBRUSH CLEANING MECHANISM

✓ Bolted Brush assemblies for simple replacement









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 ScrewConveyors
- 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 materialsHandling
- 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