

### **DSTEP - Fine Screening**

### **Process Solutions for a Better World**

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.





### **DSTEP Fine Screening**

Channels Widths

16-80"

400-2000m

### **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.

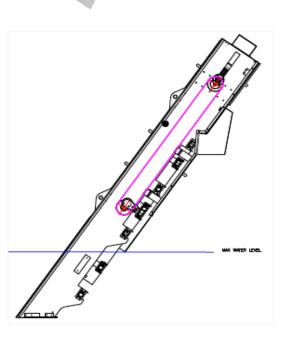
The production team is composed by assemblers and certified welders, experts in TIG (Tungsten Inert Gas) welding, a process of arc welding with consumable electrode (Tungsten), under protection of inert gas. After the welding processes, the Stainless Steel is passivated by our operators.

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.



- Equally spaced bars form the screening area, and solids accumulate at the screen base until a water height level sensor activates the Step Mechanism.
- The influent flows through the screen, while the solids settle on the steps.
- The step screen ensures a important open area and consequently a reduced headloss. The height of the screen area is therefore very wide, so the step screen can also be installed in the channels of considerable depth.
- Increase capacity of existing channels with screen-intank unit adjacent to existing installation without modification of channel.





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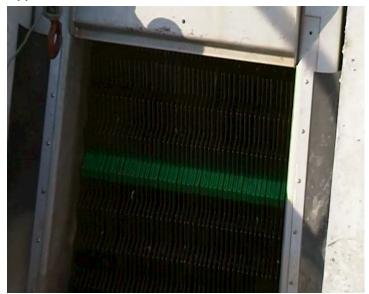
SPACERS Durable Plastic

### **FEATURES**

- ✓ **Spacer replacement:** Our Lamella spacers are made of durable plastic with a 5 year, with up to three times longer life than metal spacers Please consider that in high grit applications, spacer life is reduced by a factor of 3
- ✓ Fixed lamella thickness is 3mm. Full width mobile
- ✓ Chain replacement: As the chain is not submerged in our designed, replacement is required every 10 years. Chain is made in AISI 316 Stainless steel for exceptional corrosion resistance.

### Filter Mat separation of up to a 1 mm aperture

During the operation, the materials retained by the screen form a filter mat, allowing additional filtration of finer solids which are difficult to retain with other types of screen.





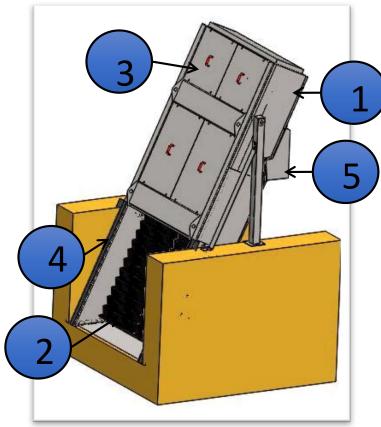




### **DSTEP - Fine Screening**

Spacing 3-6mm

# **COMPONENTS**



# Item	Description
1	Stable screen frame made of folded profiles with optimized strength characteristics
2	Bar space 3-6mm (1/8-1/4in) with HDPE spaces between fixed and mobile lamellas
3	Removable covers for hygienic encapsulation above the flume
4	Lateral flaps to be adapted to the channel
5	Solid discharge



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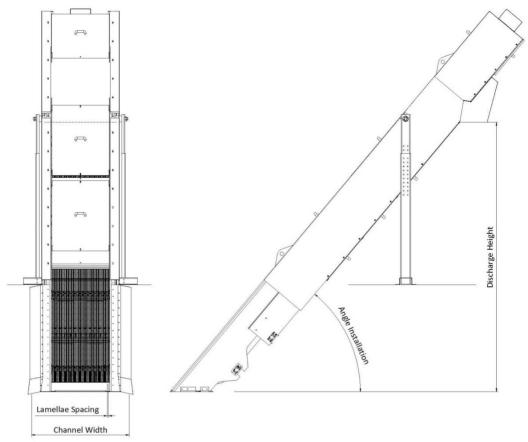


### **DSTEP - Fine Screening**

# **MODEL & DIMENSION**

45-55 installation MODEL*	Channel width		Discharge height from channel bottom		Standard Spacing
	inches	mm	inches	mm	mm
DSTEP 400	16	400	91	2300	3-6
DSTEP 600	24	600	91	2300	3-6
DSTEP 800	31	800	91	2300	3-6
DSTEP 1000	39	1000	98	2500	3-6
DSTEP 1200	47	1200	98	2500	3-6
DSTEP 1400	55	1400	98	2500	3-6
DSTEP 1600	63	1600	98	2500	3-6
DSTEP 1800	71	1800	98	2500	3-6
DSTEP 2000	79	2000	118	3000	3-6

\* Other configuration available on demand



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# 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