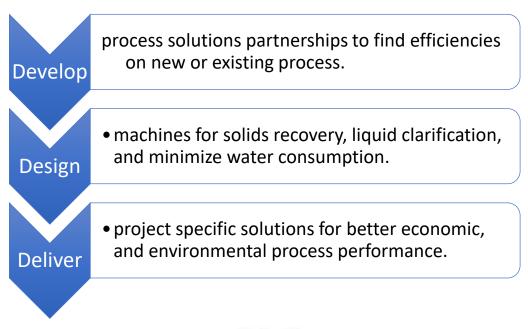
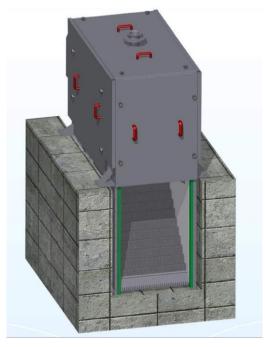


**STEPRAKE** Step Screen-Fine Screening

## Industrial and Municipal Process Equipment Packages





DRYCAKE projects@drycake.com



## **STEPRAKE** Step Screen-Fine Screening

The step screen is used for the solid-liquid separation operations, as a system for the mechanical separation of grits, detritus and floating solids.

Its typical field of usage is in the wastewater treatment plants, where an effective primary screening is the best way to achieve efficiency in the following processes.

The filtering unit is divided in two interpenetrating blocks, one mobile and one steady, whose relative movement produces a steady going of the filtered solids towards the discharge, leaving the filtering spaces always free and clean. Furthermore, the deposit of the solid particles on the screening bed can be used to improve the percentage

of removed floating debris. When choosing the filtration spacing, must be took into account thewidefiltering surface that allows to work with low fluid speed through the grid, reducing the resulting headloss

### **APPLICATIONS**

- Municipal sewage
- Industrial wastewater treatment
- Cattle-breeding, foodstuffs industries, farms, slaughterhouss, paper-mill, tannery





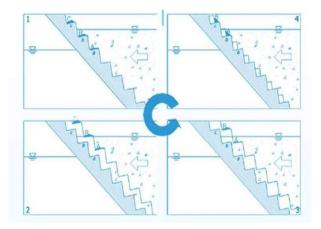




## **FEATURES**

- Series of lamellae with a step design, available in stainless steel AISI 304 or 316
- ✓ Simple and robust construction
  - Absence of overly complicated referral/crank mechanisms
- No chains or deformable quadrilaterals
- All transmission systems, bearings, shafts and couplings are out of the channel (no contact with the treated fluid and easy maintenance)
- The all-around cover is designed to protect the machines till the channel border, protecting also the moving parts from the weather

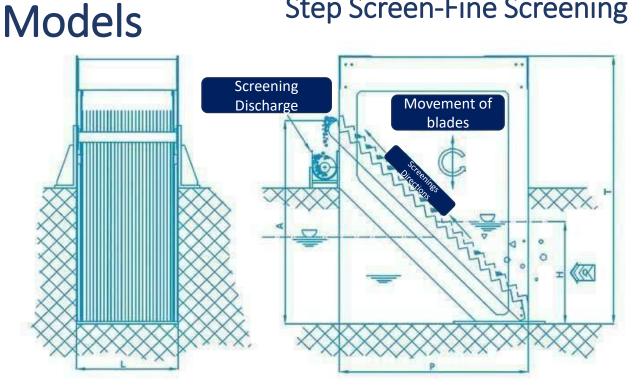






# **STEPRAKE**

## **Step Screen-Fine Screening**



Discharge height		Total height		Lenght		Width	Max Water Level		Typical width		Peak Flow			
А		Т		Р		L	Н		Ľ		Spacing 3 mm		Spacing 6 mm	
In	mm	in	mm	in	mm		In	mm	in	mm	MGD	l/s	MGD	l/s
24	600	40	1000	28	700	Project Specfic	24	600	12	300	3,42	150	3,8	165
36	900	54	1350	42	1050		34	850	20	500	8,33	365	9,1	400
48	1200	66	1650	54	1350		40	1000	20	500	9,81	430	11,0	480
59,6	1490	84	2100	64	1600		48	1200	40	1000	23,97	105 0	26,2	1150
78	1950	106	2650	86	2150		60	1500	60	1500	45,65	200 0	49,8	2180
100	2500	122	3050	106	2650		72	1800	60	1500	54,21	237 5	60,5	2650

The figures explain the technical characteristics of the screens for some typical installation, the width can be fitted according to the installation requirements. Other constructive dimensions are possible with atechnical and economical feasibility.



# 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