



# A3 Multi-Rake & Step Screens

*[www.a3-usa.com](http://www.a3-usa.com)*

**Wastewater Equipment**

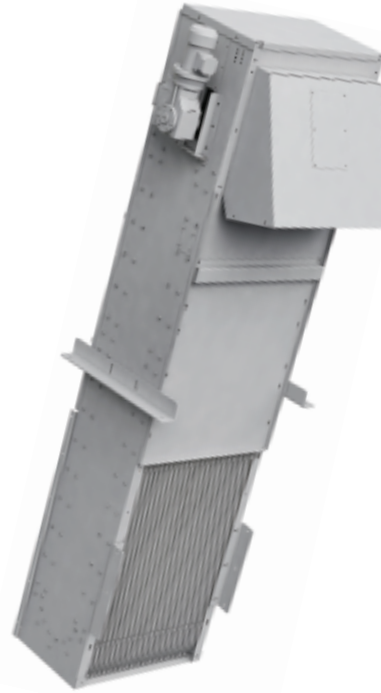
# CBS Multi-Rake Bar Screen

*The CBS multi-raked bar screen is ideal for pre-treatment of wastewater for channel installation.*

The CBS screen is a bar screen placed in a channel, 60-75 degrees from horizontal.

It uses equidistant 304 or 316L stainless steel bars located in the bottom section of the unit. Solids accumulate as wastewater travels through the screening section and are continuously removed via multiple rakes. The rakes fit within the bar spacing and are moved by a transmission chain attached to a gear motor located on top of the machine. The motor operates intermittently and transports the solids from the screening section to the top where they are discharged.

The CBS screen comes in standard sizes listed, or it can be fully customized based on individual requirements.



- Rakes fabricated from a single piece of thick steel, for superior fit and rigidity
- Auto-reverse & intelligent protection built-in (torque & overload sensing)
- Chain guide channels eliminate underwater bearings
- Fully automated scraper
- Removable cover
- Optional window opening
- S/S drive chain
- Selectable bar spacing
- Easy to retrofit existing systems
- Can be controlled via pre-set liquid levels or set to operate continuously

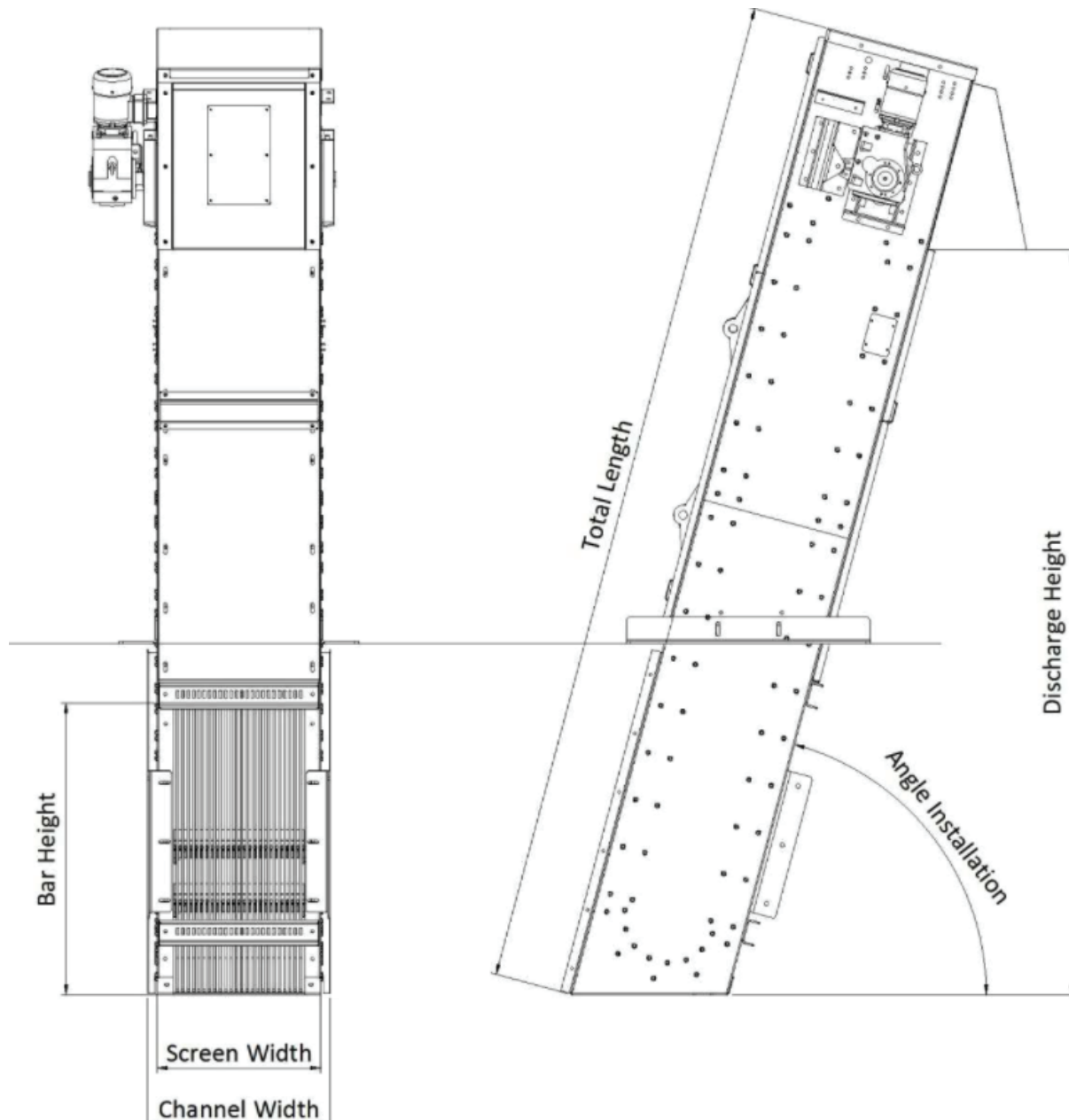


*Discharge chutes from dual CBS screens*



*Close-up of bar and rake mechanism from CBS screen*

# CBS Multi-Rake Bar Screen - Dimensions



Model	CBS - 1	CBS - 2	CBS - 3	CBS - 4	CBS - 5	CBS - 6	CBS - 7	CBS - 8	CBS - 9
Channel width	16	24	31	39	47	55	63	71	79
Discharge height	91	91	906	98	98	98	98	98	118
Angle of installation	75°	75°	75°	75°	75°	75°	75°	75°	75°
Number of rakes	2	2	2	2	2	2	2	2	2
Total length	132	132	132	132	132	132	132	132	159
Screen width	15	22	30	38	46	53	61	69	76
Height of bars	24	24	24	31	31	31	31	31	51

*All dimensions in inches; custom sizes also available*

# CPS Perforated Plate Screen - Overview

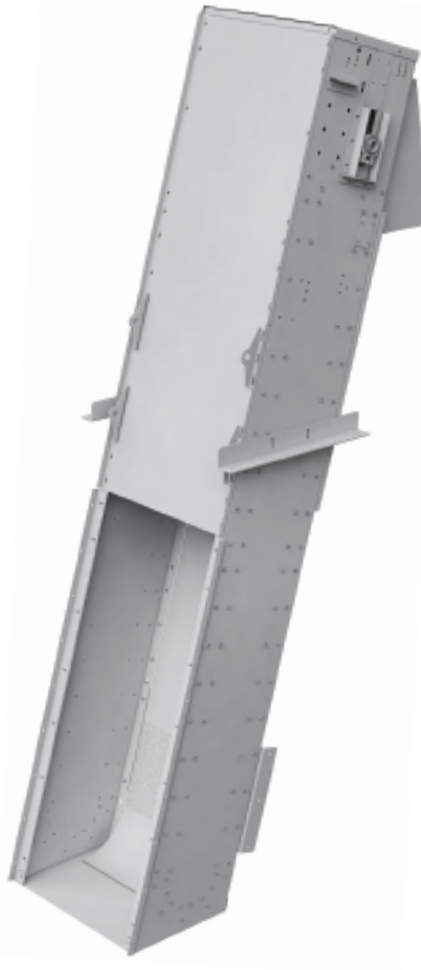
*The CPS perforated plate screen is a channel screen designed for headworks applications.*

The CPS is a perforated plate channel screen oriented on a 75 degree angle from horizontal.

The screen utilizes a stainless steel perforated plate with hole diameters ranging between 2 and 10mm.

The wastewater is filtered as it passes through the screen. As solids begin to blind the plate the water level increases and the automated cleaning system is activated.

The cleaning system consists of brushes connected to a set of 2 chains, each connected to sprockets driven by the gear motor located on the top of the machine. When the gear motor starts, the brushes transport the solids from the bottom of the channel to the discharge at the top of the machine.

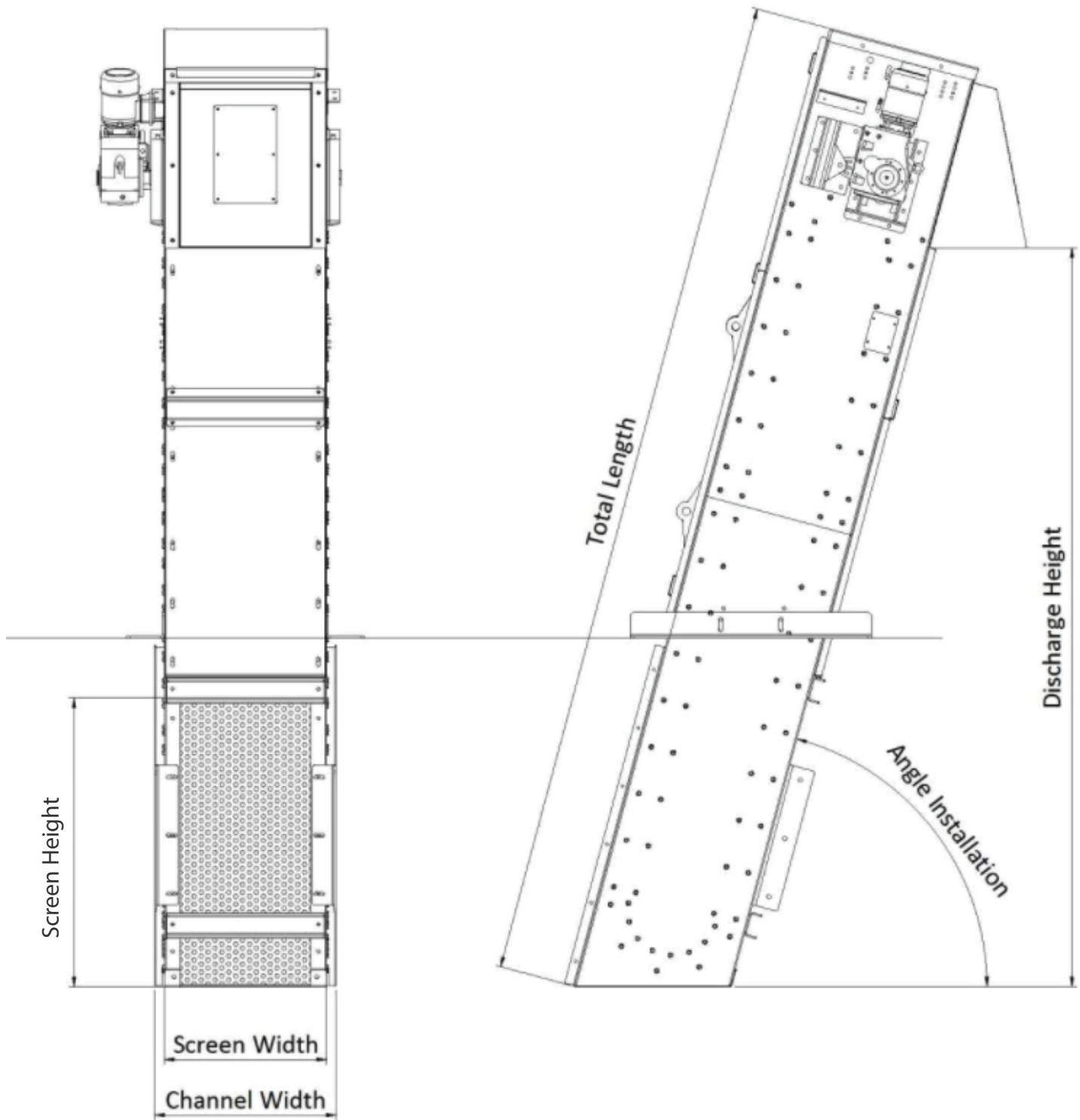


- Heavy-duty, long life brushes
- 2-10mm holes available
- Auto-reverse & intelligent protection built-in (torque & overload sensing)
- Fully automated brushing
- Removable cover
- Optional window opening
- S/S drive chain
- Various channel sizes
- Easy to retrofit existing systems
- Can be controlled via pre-set liquid levels or set to operate continuously



*Perforated plate with brushes on a CPS screen*

# CPS Perforated Plate Screen - Dimensions



Model	CPS - 1	CPS - 2	CPS - 3	CPS - 4	CPS - 5	CPS - 6	CPS - 7	CPS - 8	CPS - 9
Channel width	16	24	31	39	47	55	63	71	79
Discharge height	91	91	91	98	98	98	98	98	118
Angle of installation	75°	75°	75°	75°	75°	75°	75°	75°	75°
Number of brushes	2	2	2	2	2	2	2	2	2
Total length	132	132	132	140	140	140	140	140	159
Screen width	15	22	30	38	46	53	61	69	76
Screen height	31	31	31	39	39	39	39	39	59

*All dimensions in inches; custom sizes also available*

# CSS Step Screen - Overview

*The CSS step screen is a channel screen that uses a set of fixed and stationary "steps" to remove and gently transport solids from a wastewater stream.*

The step screen uses two sets of parallel bars that form 'steps' – one that is moving and one that is stationary. The moving set of steps reside in the spaces between the bars of the stationary set of steps.

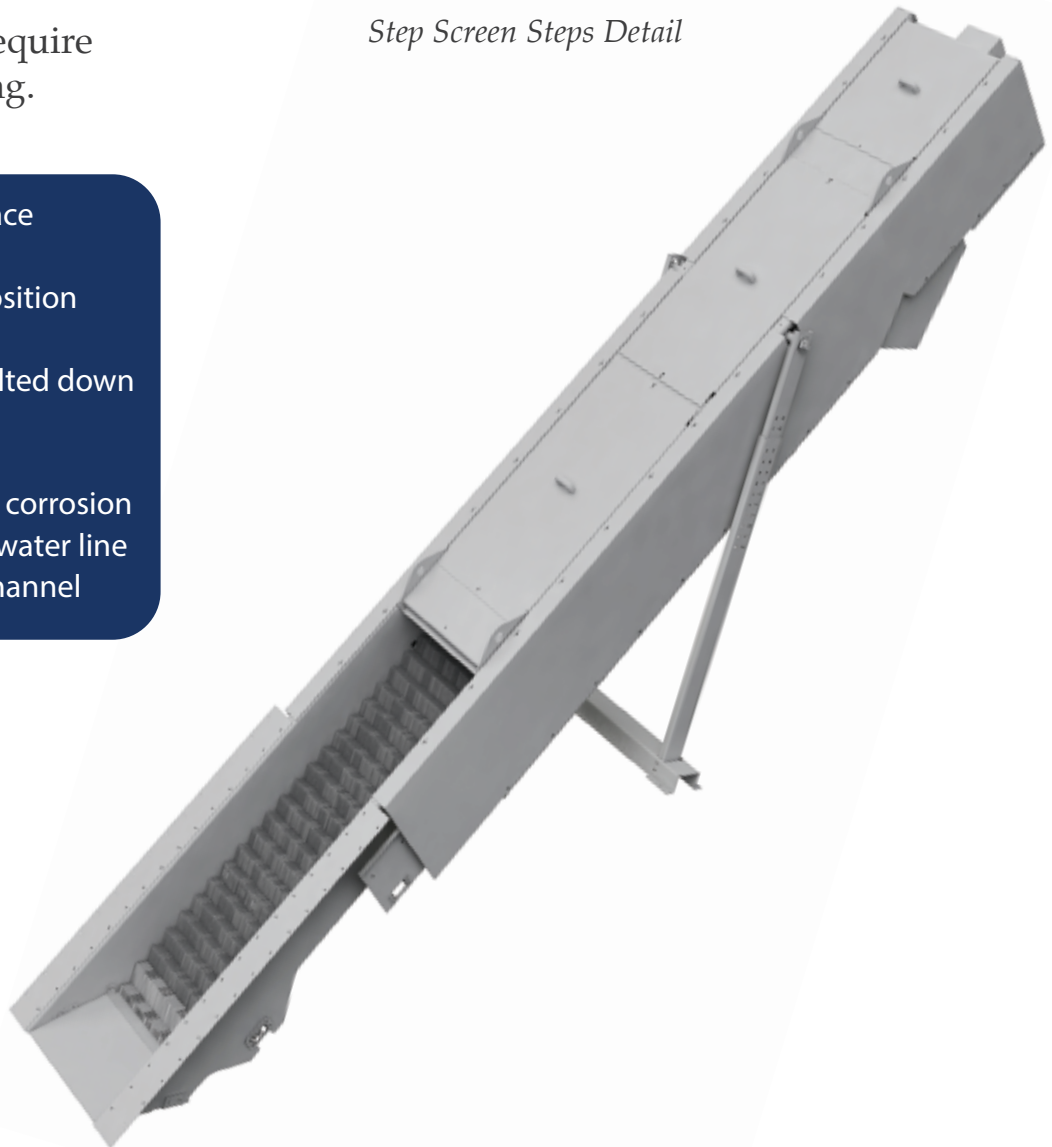
The moving steps travel vertically up, then horizontally forward, and then return to the original location in an overall circular motion. In this way, solids are picked up from one step and transported to the next step until they reach the discharge at the top of the unit.

The step screen does not require brushes, scrapers, or rinsing.

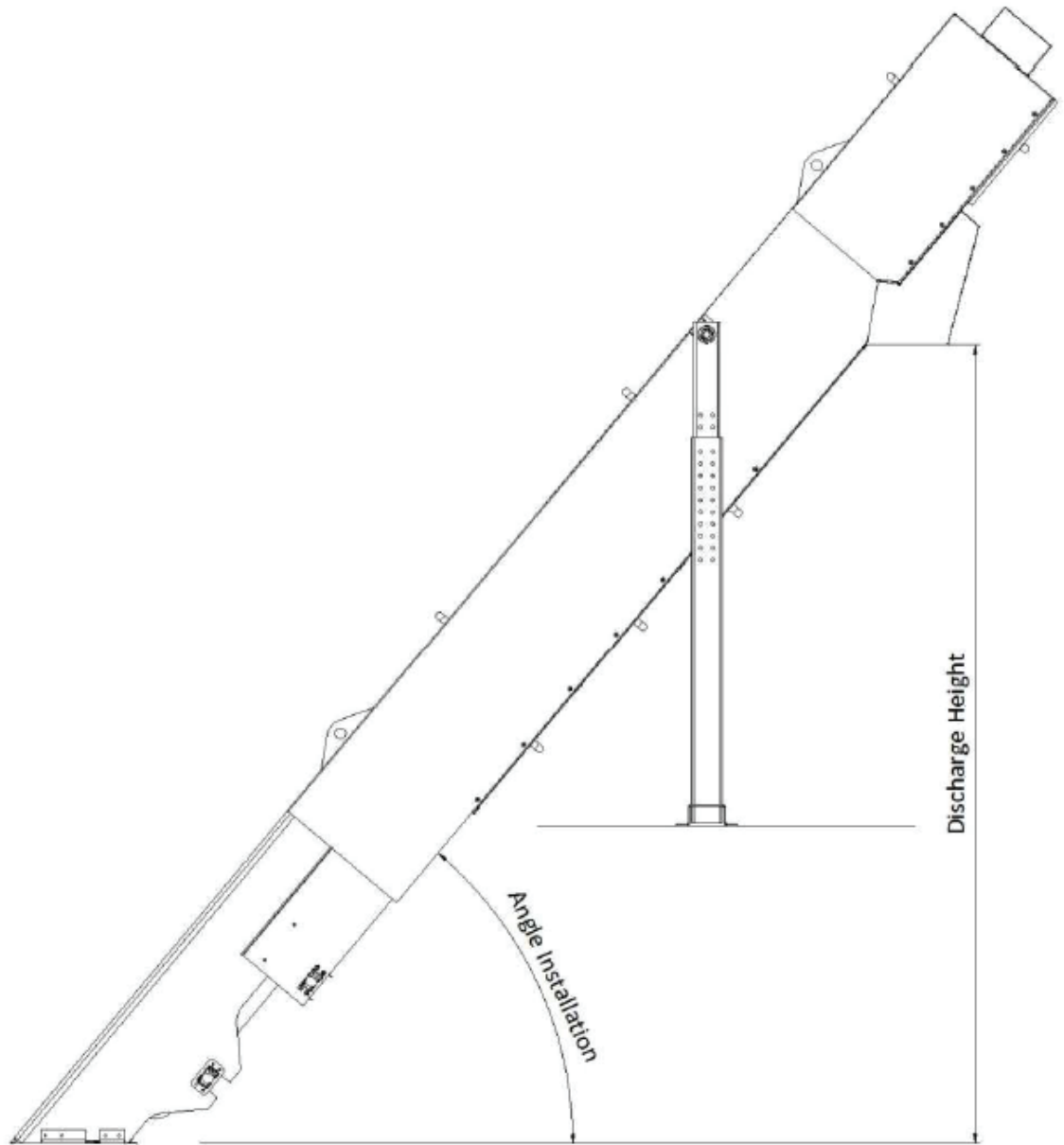
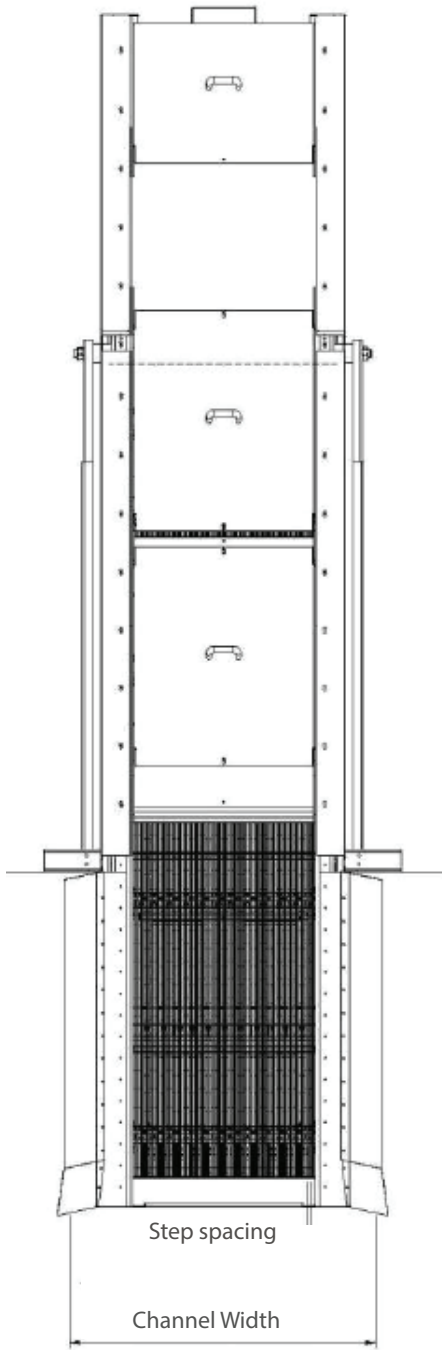


*Step Screen Steps Detail*

- Self-cleaning screening surface
- Removable covers
- Floor plate reduces grit deposition
- Low noise during operation
- Base does not need to be bolted down
- Easy to retrofit
- Low hydraulic loss
- Gear motor housing reduces corrosion
- Drive unit & bearings above water line
- Unit can be pivoted out of channel



# CSS Step Screen - Dimensions



Model	CSS - 1	CSS - 2	CSS - 3	CSS - 4	CSS - 5	CSS - 6	CSS - 7	CSS - 8	CSS - 9
Channel width	16	24	31	39	47	55	63	71	79
Discharge height	91	91	91	98	98	98	98	98	118
Standard Spacing (mm)	6	6	6	6	6	6	6	6	6
Angle of installation	45°-55°	45°-55°	45°-55°	45°-55°	45°-55°	45°-55°	45°-55°	45°-55°	45°-55°

*All dimensions aside from "Standard Spacing" in inches; custom sizes also available*

