



# Step Screen KD 33



Danish Wastewater  
Equipment

# Step Screen KD 33

**Step Screen KD 33 is the latest screen from Danish Wastewater Equipment A/S. As opposed to the curved bar screen type KD 14, the Step Screen has the advantage of having smaller gaps (aperture) and the possibility of larger discharge height.**

## Construction

The Step Screen is made of stainless steel and is available in either standard quality SS2333 or acid resistant quality SS2343. Nordgear gear motor, gearwheel and chain in dublex made in special steel of the make Wibbermann, chain with one or two Rosta automatic chain adjusters, all bearings in moving part are SKF standard bearings, life lubricated corrosion resistant bearings, other bearings are standard bearings.

After processing, all stainless steel has been pickled fully (immersed) to ensure the best possible corrosion protection.

The Step Screen is delivered fully encapsulated in order to ensure the best possible working environment and to safeguard against crushing. The covers are made of stainless steel SS2333, can be locked, covers can be provided with ventilation connection piece Ø100 for external ventilation (exhaust).

The standard Step Screen is delivered for 45 degree mounting (other mounting angles can be made specially).

The standard version of the KD33 Step Screen is provided with a stainless steel terminal box where all internal cables are connected.

Step Screen is mounted at the top, so that the entire screen can pivot. This means that the screen can easily be lifted to the horizontal position for servicing. Towards the duct sides, the Step Screen is provided with a rubber sealing of EPDM rubber and the bottom has two adjusting screws to ensure horizontal storage.

In connection with the development of Step Screen KD 33, particular care has been taken in connection with the movable screen part to ensure that stones and other abrasive elements are lifted from the channel bottom,

and furthermore that the gaps are kept as constant as possible.

Discharge from the Step Screen can be led either directly to a container or to either conveyor type KD02, worm press KD03, grit washer type KD26, or grit press type KD9.

## Control

Step Screen KD33 is available with standard control mounted in a composite cabinet including both a logic module and a frequency converter and with the following connections for level controllers or water level sensor.

All operating signals/alarms for the grate are potential free signals (separate control description or chart can be provided).

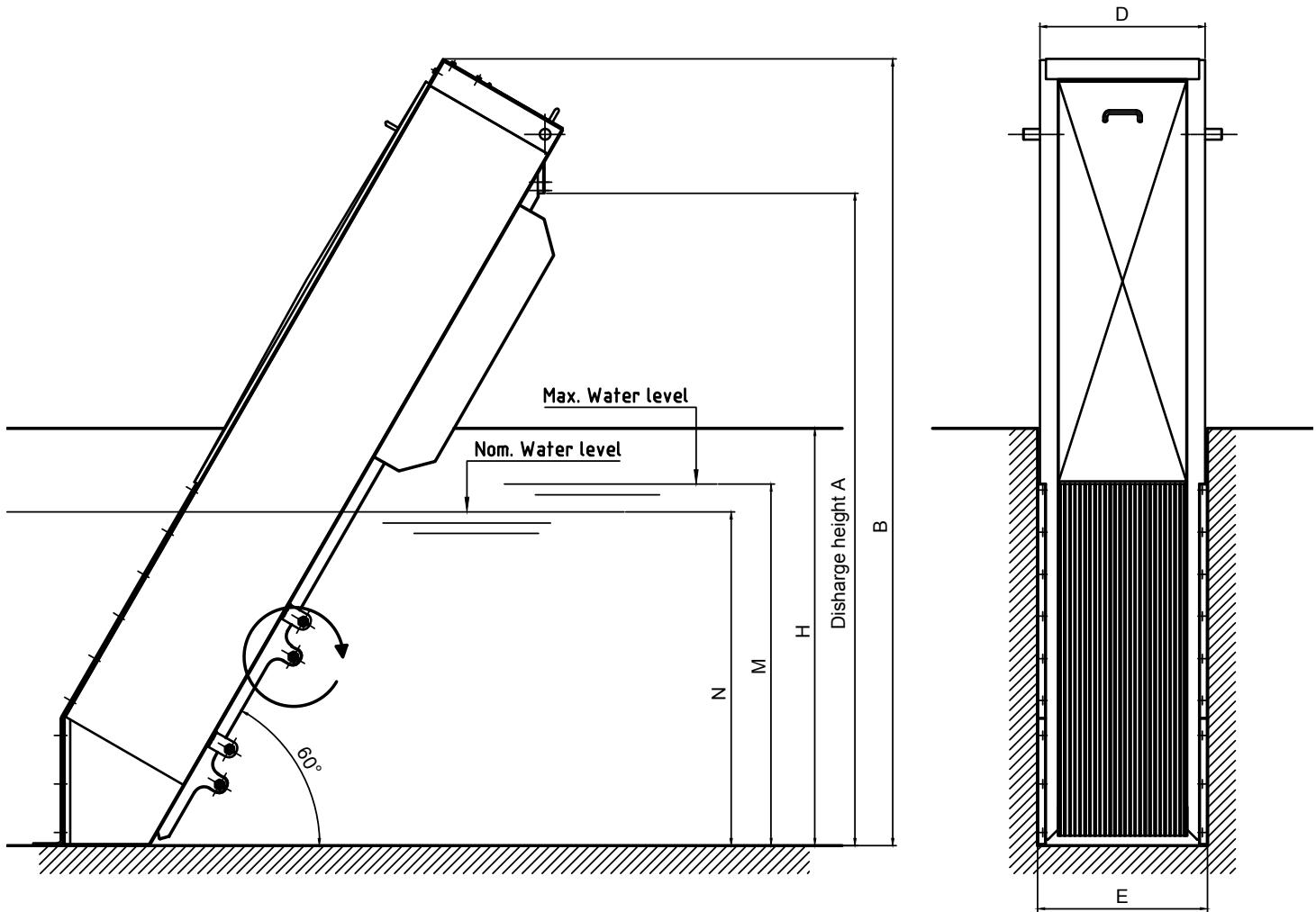
## Function

The Step Screen consists of a fixed and a movable row of step bars. These step bars go through a circular inclination so that the screen material is lifted from step to step and finally pushed out of the discharge. The screen bars are provided with a backward inclination of 5 degrees to ensure that also round objects will be carried upwards.

The screen can go one step at a time or continuously. If a standard control is used, the screen will run at two speeds. At a standard load, the screen will run at half speed to ensure minimum wear; if the water level in the feeding channel continues to rise, the screen will automatically switch to full speed, leading to increased capacity. The screen can either be level controlled or run on a timer, and the built-in frequency converter contributes to ensuring the speed and protecting against overload.

The advantage of running at two "step" speeds is to ensure a grate unit with the smallest possible gaps to improve the screening.





**Step Screen KD 33 is available with a width up to 2000 mm and a gap of 1-6 mm**

Type	Discharge height A	Total height B	Screen width D	Channel height C	Channel width E	Max. Water level M	Nom. Water level N
KD 33.1	750	1300	300-1000	-	Min. 350	-	-
KD 33.2	1250	1800	300-1000	-	-	-	-
KD 33.3	1750	2300	500-1500	-	Min. 550	-	-
KD 33.4	2250	2800	500-2000	-	-	-	-
KD 33.5	2750	3300	-	-	-	-	-
KD 33.6	3250	3800	-	-	-	-	-
KD 33.7	3750	4300	-	-	-	-	-
KD 33.8	4250	4800	-	-	-	-	-

