

# HUBER Curved Bar Screen CurveMax®



Compact curved bar screen for reliable separation of solids from wastewater

- No submerged driving parts
- Low headloss due to the large effective bar rack surface

## ►► Design and function

The CurveMax® Screen is perfectly suited to both municipal and industrial wastewater, and process water screening. Material removal from the bar rack starts at a tangent to the channel bottom so that any accumulation of disturbing material is eliminated. The optimal approaching flow conditions and large effective bar rack surface ensure a high hydraulic throughput capacity under any operating conditions.

The curved bar rack is cleaned by a rake. Depending on the bar spacing, the bar rack design is either a bar or non-blocking wedge wire profile.

At the end of the bar rack cleaning cycle the rake is cleaned by a pivoted comb discharging the removed screenings into a downstream unit. As the cleaning velocity is variable, the screenings discharge capacity is then adjustable. This is particularly beneficiary in case of increased screenings loads, e. g. due to sudden peak loads caused by emptying of upstream stormwater tanks.

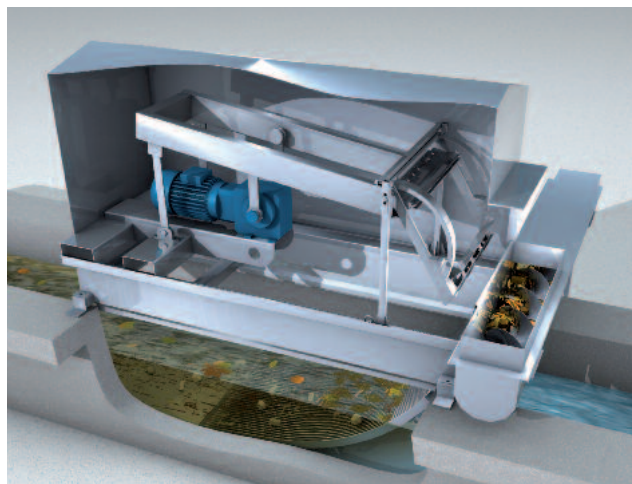
The easy to access and maintain drive unit is installed above the channel. The compact frame of the CurveMax® Screen allows for a low installation height above ground level. A mechanical linkage converts the rotating course of movement of the drive motor into a curved track.



*The HUBER Curved Bar Screen CurveMax® excels with individually adapted installation combined with its compact design.*

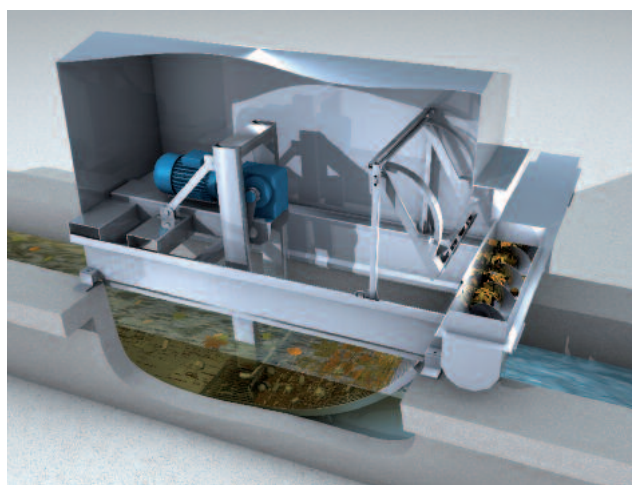


## ➤ Functional principle of the HUBER Curved Bar Screen CurveMax®



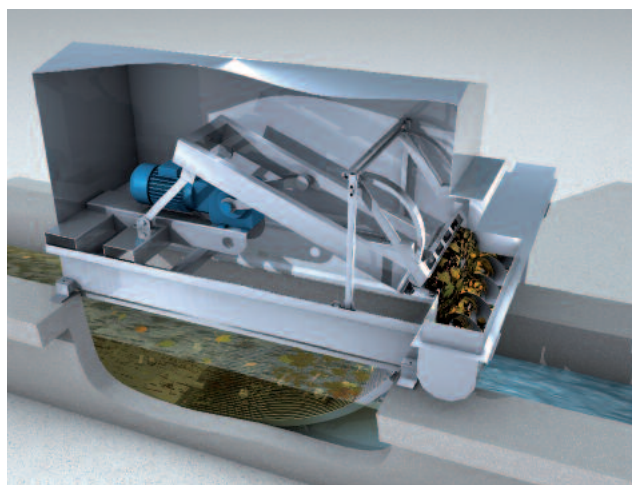
*Home position without impairment of the cross-sectional area of flow*

The schematic drawing shows the CurveMax® screen in its home position where the cross-sectional area of flow is not impaired (by the rake arm for example) and no driving parts are submerged in the water. The curved bar rack extends completely over the full channel width and ensures the optimal hydraulic utilisation of the available screen surface especially with existing channels.



*Material removal from the bar rack that extends over the full channel width*

The bottom end of the bar rack is tangential with the channel bottom. Material removal from the bar rack therefore starts straight at the channel bottom so that any accumulation of disturbing material is eliminated. The optimal approaching flow conditions and large effective bar rack surface ensure a high hydraulic throughput capacity. Depending on the bar spacing, the bar rack design is either a bar or non-blocking wedge wire profile.



*Discharge of screenings into a downstream screenings wash press*

At the end of the bar rack cleaning cycle the rake is cleaned by a pivoted comb that continuously removes the screenings without any additional spray water being required. As an option, however, the rake can be equipped with spray nozzles to achieve the organics contained within the screenings are washed out already during the removal cycle.

## ►► The benefits of the CurveMax® Screen at a glance

- No submerged driving parts
- Very low headloss due to the curved bar rack extending over the full channel width
- No accumulation of disturbing material due to material removal from the bar rack starting at a tangent to the channel bottom
- High screenings discharge capacity through adjustable cleaning cycles
- Easy-to-retrofit into existing channels, installation without channel recesses possible
- Easy to replace bar rack for problem-free change of bar spacing
- Not hindered by gravel or grit
- Compact design with a low installation height above ground level
- No additional consumables except electric current required for plant operation
- Directly, electrically driven mechanical linkage, no complex hydraulic unit required
- Simple and easy-to-access drive unit
- Completely odour-encased screen with easy to remove covers
- All machine components in contact with the medium are made of stainless steel and acid treated in a pickling bath (except drive and bearings)



*Parallel installation of several HUBER Curved Bar Screen CurveMax® units with odour-tight covers*



*Channel installation of a HUBER Curved Bar Screen CurveMax® with downstream wash press*

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