

# HUBER Multi-Rake Bar Screen RakeMax® CF



High screenings capture rate in a very narrow space

- No submerged bearings, sprockets, or regular wear items
- Designed to maximize capture rate
- Suitable for coarse and fine screen applications
- Vertical installation reduces overall footprint

## ►► Design and function

The HUBER Multi-Rake Bar Screen RakeMax® CF is ideally suited for both municipal or industrial wastewater, as well as process water screening.

The HUBER RakeMax® CF consists of a U-shaped stationary bar rack installed between two screen frames, which sit parallel to the flow direction of the wastewater. As the wastewater flows into the open front side of the screen and out through both the left and right frames, solids are retained on the inner surface of the U-shaped bar rack.

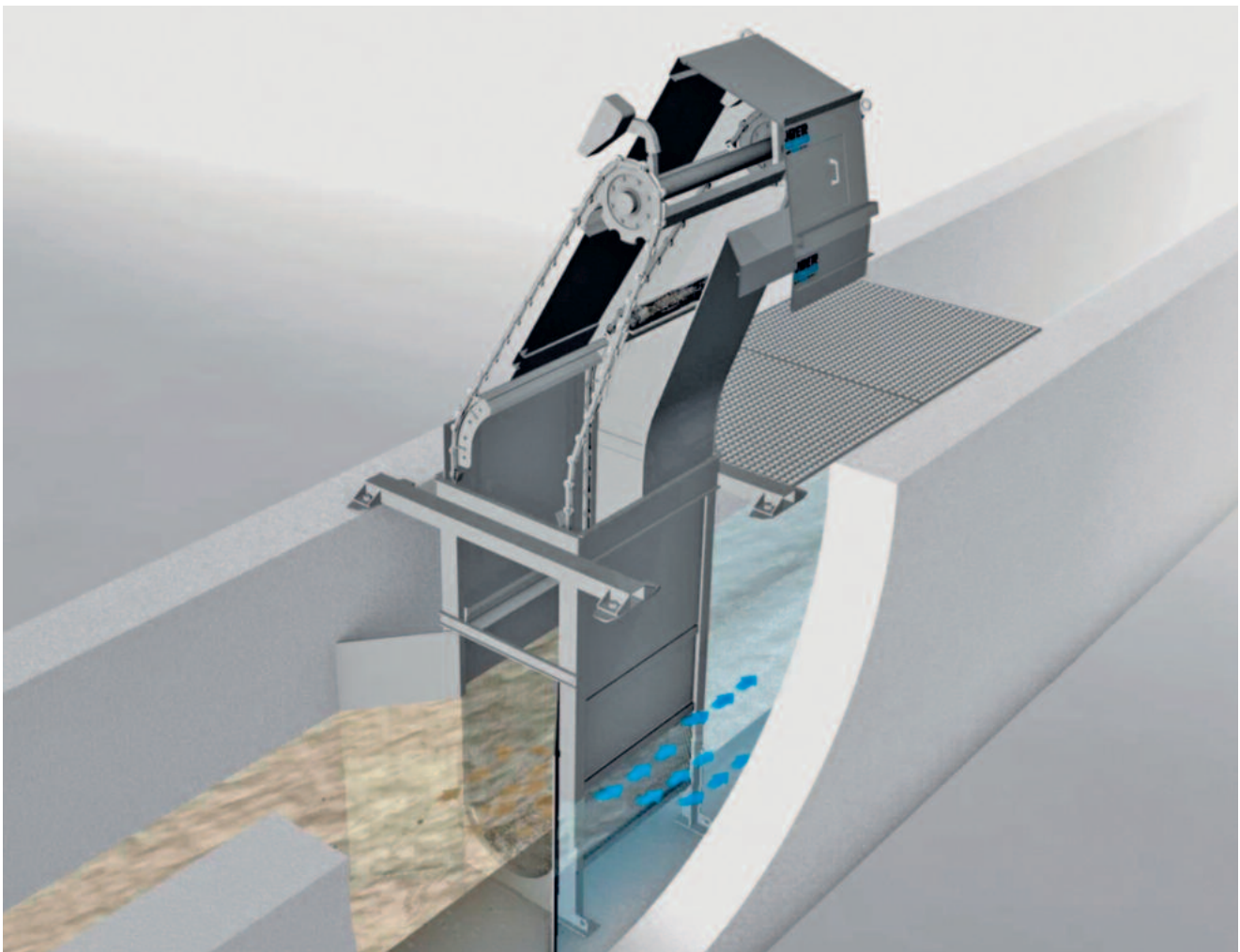
The solids retained on the bars lead to gradual blinding of the surface, creating a water level difference in the channel. When a defined water level is reached upstream of the screen, the screen bar cleaning begins.

The RakeMax® CF cleaning elements are attached to a chain system. The number of screening elements attached to the chain system is variable and adjusted to individual requirements.

At the end of the bar rack cleaning cycle the rake itself cleaned by a pivoted comb that reliably discharges the removed screenings into a downstream transport or disposal unit.

In the event the screening operation is blocked, an electric control reliably protects the screen against damage caused by overload. This easily accessed drive unit sits above the channel.

To ensure flexibility in a variety of spaces, the RakeMax® CF has a very low discharge height. Even with very deep channels, discharge height is only dependent on the installation height of the downstream screenings transport or washing system.



*Schematic drawing of the HUBER Multi-Rake Bar Screen RakeMax® CF with its U-shaped bar rack for an increased hydraulic throughput capacity*

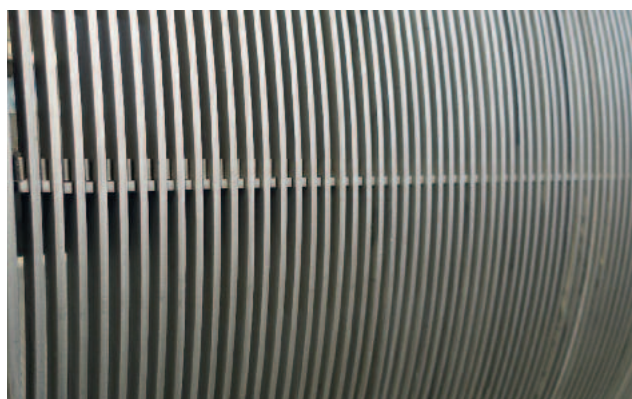
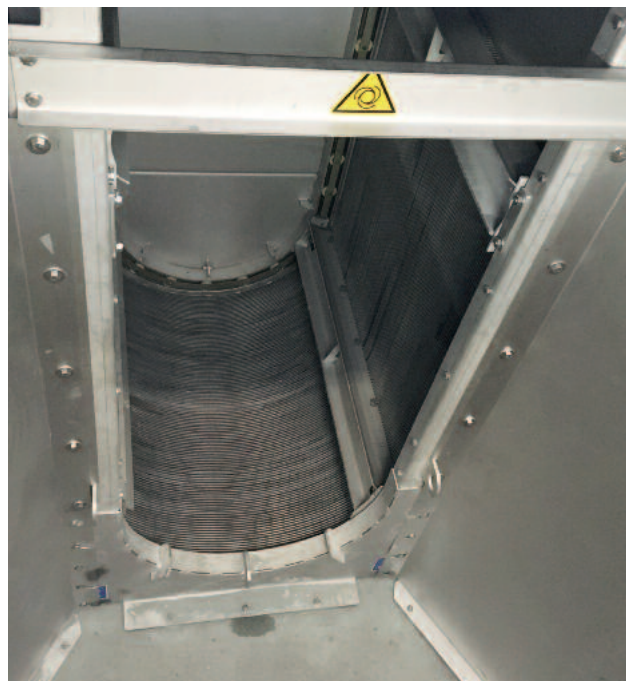
## » Design features

The RakeMax® CF covers a very wide range of applications because of its different design options. Having a wide range of options allows us to respond to the needs of individual customers as well as site-specific constructional and hydraulic conditions. The unique features presented here are only a few of the range of customizations available with the RakeMax® CF.

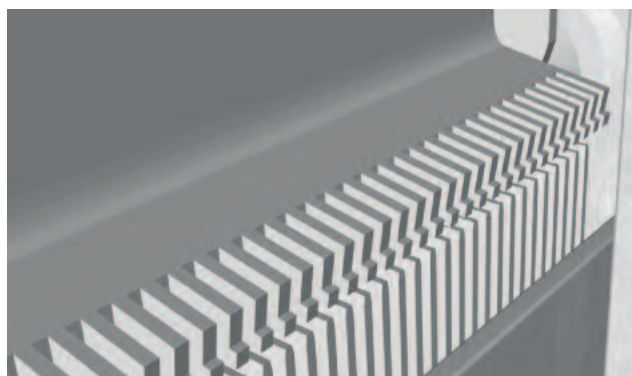
*Right:*

*The RakeMax® CF offers extra high hydraulic throughput capacity, in addition to all the well-known benefits of the proven RakeMax®, i.e. reliable solids separation and high screenings discharge capacity. These features give the RakeMax® CF optimal and efficient system dimensioning; it is not only space-saving but also reduces civil costs.*

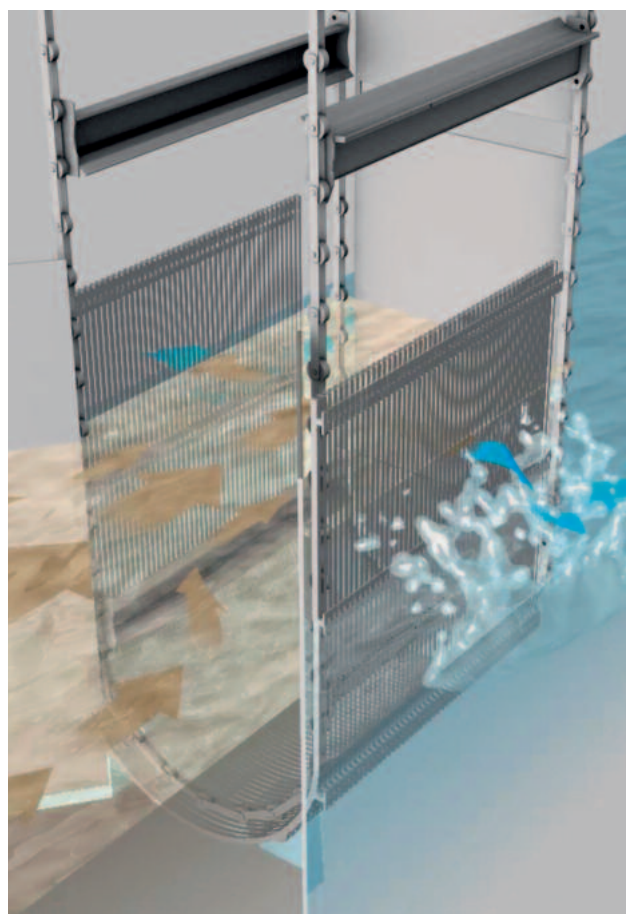
*Due to a rigid bottom chain return system, no moving parts of the RakeMax® CF are submerged in the water.*



*The rake tines, fully engaging with the bar rack, prevent jamming of solids in the bar spacings.*



*Moreover, the screen is resistant to abrasive materials, such as grit and gravel, as the screen rake engages above the bar rack.*



*The deflection of the flow improves the filter effect of the bar rack and increases solids separation efficiency.*



## ►► The benefits of the HUBER Multi-Rake Bar Screen RakeMax® CF at a glance

- High hydraulic throughput capacity even with narrow bar spacings in narrow channels due to the U-shaped bar rack
- More efficient screening provides optimal hydraulic utilization of existing channels
- Very low headloss with high separation efficiency
- Cleaning rakes design to fit snugly with the bar rack ensure a high operating reliability.
- Screen installation possible without a bottom step
- Compact design with a low discharge height above ground level
- Completely encased screen with easy to remove covers protects from odor and splashes
- Easy-to-retrofit into existing channels, installation without channel recesses possible
- The screen is a sturdy self-supporting stainless steel construction and therefore can easily be lifted out of the channel.
- Not hindered by gravel or grit
- Simple and easy-to-access chain tensioning unit
- All machine components in contact with the medium are made of stainless steel and acid treated in a pickling bath (except chains, pinions, drives and bearings). The chains and chain wheels are optionally available in stainless steel.
- High screenings discharge capacity through a variable number of screen rakes
- Automatic scraper mechanism requires no service water
- Optional integrated emergency overflow

## ►► Installation examples



*Easily retrofit in existing channels, the HUBER Multi-Rake Bar Screen RakeMax® CF is an universally applicable screen for both new and existing structures.*



*The RakeMax® CF combines the benefits of maximum screen surface and very high separation efficiency. Moreover, its space saving design reduces civil costs.*

## ►► Screen sizes

Channel width: 3 - 10 ft  
Discharge height above channel floor up to 66 ft

Bar spacings: 5/32 - 1/2 in  
Installation angle: screen section 90°/ discharge section 70°

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