

TASK

The reliable removal of large pollutant loads by means of coarse or fine screening in the mechanical pre-purification of wastewater, within pumping stations or in the inlet area of wastewater treatment plants.

SOLUTION

The new PASSAVANT® Revolving Chain Screen KUR-C from Bilfinger Water Technologies is a complete redesign of its successful predecessor, the tried and tested KUR. Innovative production processes have succeeded in creating a top quality product which is characterised by its economic efficiency and excellent cleaning performance.

This is achieved by the utilization of flow-optimised screen bar profiles, which are tailored to hydraulic requirements, together with variably adaptable cleaning elements which can be adjusted, both in type and number, to suit the respective transport task and the requirements of the cleaning cycle.

FUNCTION

The cleaning cycle starts as soon as the drive is activated, in order to reduce the difference in water levels caused by screenings accumulating in the bar rack. During the ascending cycle, such screenings are completely removed by the cleaning elements which penetrate into the screen bars. The screenings are then collected and conveyed to the discharge point from where they are pushed, by means of an automatic stripping device, down a discharge chute to the screenings collection tank, conveyor belt, etc. The screen cleaning cycle is repeated until the difference in water levels has been completely removed.

PRODUCT VARIANTS

The PASSAVANT® Revolving Chain Screen KUR-C can be optimally tailored to suit every application:

- Vertical design or design with inclination
- Cover for hygienic reasons and odour containment, including inspection window (optional)
- Variety of cleaning elements to deal with different screenings removal tasks
- Flow-optimised bar rack profiles and curved screen bars employed on the channel bottom to meet hydraulic requirements

BILFINGER WATER TECHNOLOGIES

PASSAVANT® Revolving Chain Screen KUR-C

BENEFITS

- Exact meshing of the teeth into the bar rack due to alignment guide system
- Automatic stripping device by means of stripping ledge
- Reverse operation to remove obstacles in the bar rack
- Low maintenance, low wear and tear due to:
 - individually replaceable sprocket teeth on the drive unit
 - maintenance-free stainless steel roller chain
- No bearings below the waterline
- No dead spaces (deposits) in front of the bar rack when using curved screen bars



WATER
TECHNOLOGIES

Design Features

- Cleaning elements are bolted to the bushings of the roller chain and can be individually adjusted and replaced.
- Rake and comb plate can be individually replaced, independently of each other.
- The lower guiding section has an additional alignment guide to ensure exact tooth penetration.
- Geared motor with electric overload protection

DESIGN SIZES

The following dimensions can be supplied:

- Channel width: 0.6–3.0 m
- Channel depth: up to 15 m
- Discharge height: customised to requirements
- Bar spacing:
 - bar profile: 6–60 mm
 - brush / scraper: 2–5 mm
- Installation angle: 75°/80°/85°/90°

Further designs and dimensions are available on request, to meet your individual requirements.

MATERIALS

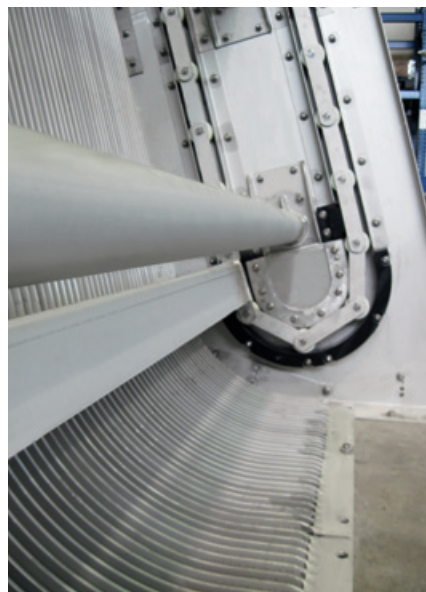
All components are made of top quality materials:

- Stainless steels are – as far as technically feasible – pickled and passivated in an acid-free solution.

FIELDS OF OPERATION

The PASSAVANT® Revolving Chain Screen is not only suitable for installation in new structures but can also be easily integrated into existing plants:

- Wastewater treatment plants of all sizes
- Pumping stations
- Industrial wastewater treatment



Detailed view of KUR-C



Erected KUR-C

Water Technologies

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