



**OSSBERGER**

**Trash Rack Cleaner**



## OSSBERGER Trash Rack Cleaners program:

Trash rack cleaners are designed with one specific task in mind: Removal of all kinds of debris suspended in the water, entering a trash rack intake,

to keep the water flow unrestricted and free of head losses. OSSBERGER Trash rack cleaners comply with such a demand and are ideal for different types of intake screens, to assure trouble-free operation for decades to come.

### Overview:



#### Type RRH

Stationary hydraulically operated units are used for intake screen sizes up to 8 meters wide and 10 meters long, placed at inclinations from 30 – 75°.



#### Type RRH-F

Hydraulically operating machines clean screen panels of up to 50 meters wide.



#### Type RRM

Stationary, chain-driven trash rack cleaners are suitable for rack screens up to 15 meters wide, 10 meters long and inclinations from 35 to 68°.



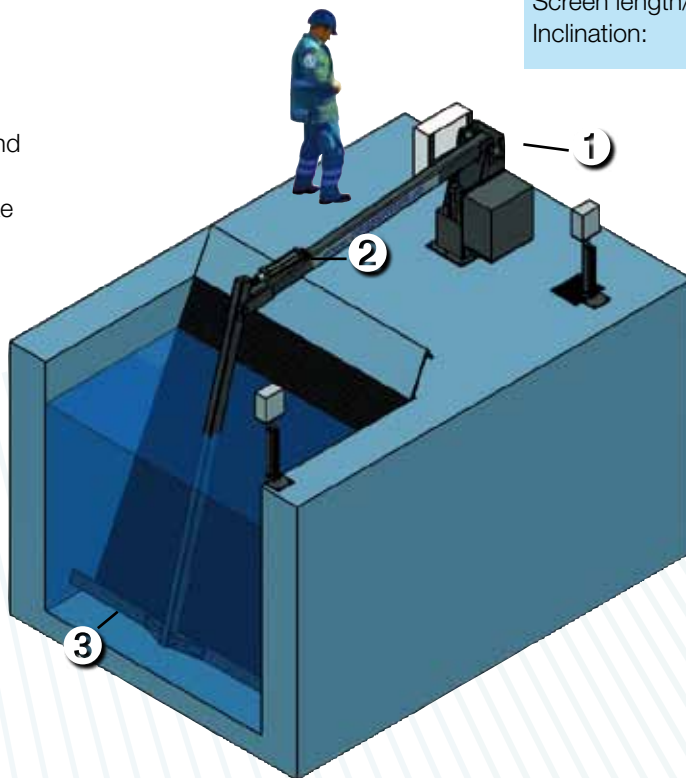
#### Type RRS and RRS-F

Stationary or traversing cable-operated machines are offered for lifting heights up to 25 meters and rake widths of 4 meters at screen inclinations from 75 – 85°.

# Stationary, hydraulically operated Trash Rack Cleaners, Type RRH

Screen width:	0.5 – 8 m
Screen length/Intake depth:	0.8 – 10 m
Inclination:	30 – 75°

- 1: Support stand
- 2: Boom
- 3: Cleaning rake



Units of the type RRH are comprised of a wide reaching articulating boom with a cleaning rake/wiper bar, attached in perpendicular direction to the flow. This boom consists of two individually jointed arms which are operated by hydraulic cylinders.



- **Support Stand**

The rigidly designed heavy steel support stand can be bolted directly to the operating platform.

- **Boom**

The boom connects to the support stand by two axles with flange bearings to permit the required rotation. Despite life-long lubrication, these flange bearings are also furnished with grease nipples. Both arms are fabricated of heavy-wall steel tubing, which offer exceptionally high torsional strength.

- **Cleaning Rake**

The cleaning rake head is comprised of an angular steel rake profile, to which a wiper edge is fastened, ensuring thorough trash rack cleaning and removal of even the smallest pieces of debris.

Perfect alignment of the trash rack bars is not absolutely essential since the cleaning rake does not engage in-between the steel bars.

- **Hydraulic Power Unit**

The hydraulic power system provides the oil pressure necessary to operate the servomotors. Pressure relief valves provide overload protection. Specially formulated environmentally safe hydraulic oil can be used.

- **Control Functions**

The control system supplied assures fully automatic operation of the rake with an option to integrate the control functions of an OSSBERGER Trash Conveyor System even at a later date.

## Traversing, hydraulically operated Trash Rack Cleaners, Type RRH-F

In case the intake width of the screen exceeds the maximum rake width, or if several intake bays exist, the hydraulic machine can be built with a horizontally traversing carriage, thus cleaning each intake area selectively or in sequence.

Screen width:	up to 50 m
Screen length/Intake depth:	up to 10 m
Inclination:	30 – 75°

- **Carriage**

Movable machines of the type RRH are designed similarly to the smaller, stationary types, but compared with these, are of heavier design. The whole unit travels on rails from one intake bay to the next by means of an electric motor driven carriage.

- **Container**

The carriage is integrated with a standardized container, holding the debris while moving with the machine. From the operating deck it is directly conveyed to a pick-up truck, whereby no intermediate storage of the debris is necessary. A screen apron permits a smooth transfer from the screen into the container without problems.

- **Level Differential Control**

Pressure sensors are provided to register individual water levels before and behind the trash rack.

- **Cleaning Rake**

The rake head can be tilted to assure that any debris that might get lost during the cleaning procedure is kept to a minimum.

- **Control Logic**

With a programmable logic controller and the selector switch setting in AUTO mode, a precise sequence of the carriage movement, the cleaning cycle and the machine function monitoring is assured.



## Stationary, chain-driven Trash Rack Cleaners, Type RRM

Machines of the type RRM are stationary trash rack cleaners with rotating rake heads, pulled by two endless chains.

Screen width:	up to 15 m
Screen length/Intake depth:	up to 10 m
Inclination:	35 – 68°



- **Drive**

The two support stands for the trash rack cleaner are made in fabricated steel and are bolted to the operating deck. The overload protection - torque dependent, is located inside the drive stand.

The drive and deflecting wheels, which are located above the water line are equipped with re-greasable bearings. The two wheels under water are maintenance-free.

- **Cleaning Rake**

The cleaning rake head consists of a special I-beam carrier, equipped with a heavy-duty rubber wiper, which is highly wear resistant.

- **Chains**

The chains can be re-tightened by means of easily accessible tensioning devices.

# Stationary and traversing cable-driven Trash Rack Cleaners, Type RRS

Cable driven machines of the type RRS include stationary or movable trash rack cleaners for intake depths of more than 10 meters.

Cleaning width:	up to 4.0 m
Screen length/Intake depth:	up to 25 m
Inclination:	75 – 85°
Intake width:	up to 50 m

- **Cable Winch**

The cleaning rake head is pulled over the screen surface by a hoisting winch utilizing two traction and one swivel actuating steel cable, driven by an electromotor. Overload and slack cable conditions are reliably monitored.

- **Cleaning rake**

Type of the intake structure and extent of debris accumulation are decisive for the decision whether to use a trough-type or gripper-type rake head.

The down movement of the rake head is in the “open” position, which is effected by gravity.

The heavy-duty run and support wheels are restraint-guided between the screen bars.

Arriving at the screen bottom the rake head tilts to the “close” position, and is hoisted up by the cable winch.

Utilizing the trough-type rake head, the apron can be tilted for a better debris discharge.

The gripper-type rake head is always fully tilted in.

- **Disposal of debris**

Different types of debris disposal are available: Container integrated into the rake carriage, a conveyor belt or water flush disposal trough.



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