

CHAIN SCREENS RBS

Subvertical Chain Screens

MACHINE DESCRIPTION

Subvertical chain screens, mod. **RBS**, made by **R.E.M.**, are usually used in treatment plants for:

- **WASTEWATERS.**
- **WATERS FROM CIVIL AND INDUSTRIAL PLANTS.**
- **WATERS IN RAISING STATIONS TO PROTECT SUBMERSIBLE PUMPS.**

This model of screen, discharges considerable dimensions of screened materials that can, subsequently, be compacted and unloaded through the wastewater conveyor chain. It requires to be installed into an open channel. The equipment is installed directly in the channel in contact with the bottom and with the side walls. The bars of the screen, made of stainless steel AISI304, capture all the solids having dimension greater than the gap of the bars.

A special device composed of combs, made of stainless steel, cleans the screen and conveys the screened materials toward the unloading chute at a height. The combs are cleaned by a special scraper with a damper piston.

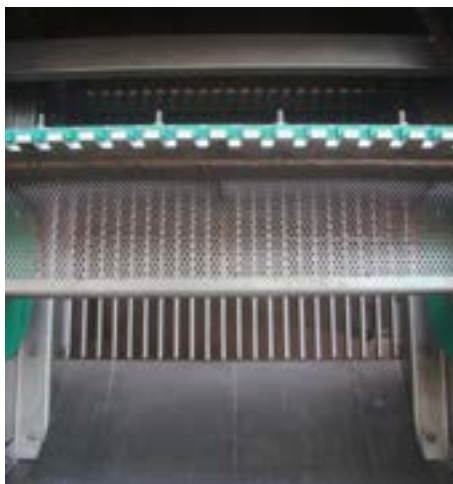
WORKING LOGIC FOR SUBVERTICAL CHAIN SCREENS RBS

The catenary bar screen is a machine based on the so-called "plugging" working principle, that means that a filtering element is fitted on the unit. The filter captures the suspended particles in the effluent inducing a progressive reduction of the open area for the effluent flow.

Whenever the open area is reduced by such amount that the headloss induced reaches a preset value, the cleaning system is activated.

The cleaning system is made of a rake with a perforated collecting spoon capable of removing the captured particles conveying them toward the outlet. A wiper will completely remove the solids from the spoon. The cleaning system is operated by 2 roller chains driven by a single gear motor.

Alternatively the screen may be simply controlled by a timer based on a duty/stand-by cycle. The set-up of the timer depends on the working conditions and flow. In both cases we advice to have the chain to run for 2 complete turns before stopping. The stop position should be in the return section above the maximum water level.



MAIN FEATURES FOR THE BAR SCREEN RBS

RBS bar screens have the following characteristics:

1. Standard execution in st. st. AISI 304/AISI 316.
2. No mechanical parts in direct contact to conveyed products.
3. Low speed - No blocking or clogging even when extracting fibrous material.
4. Completely sealed unit outside of the channel for leakage and odour-free environments.
5. Possibility to discharge in dumpsters or other equipment.
6. Extremely easy to transport materials even of difficult composition.
7. Maximum versatility, high processing outputs.
8. Chain entirely made of stainless steel.

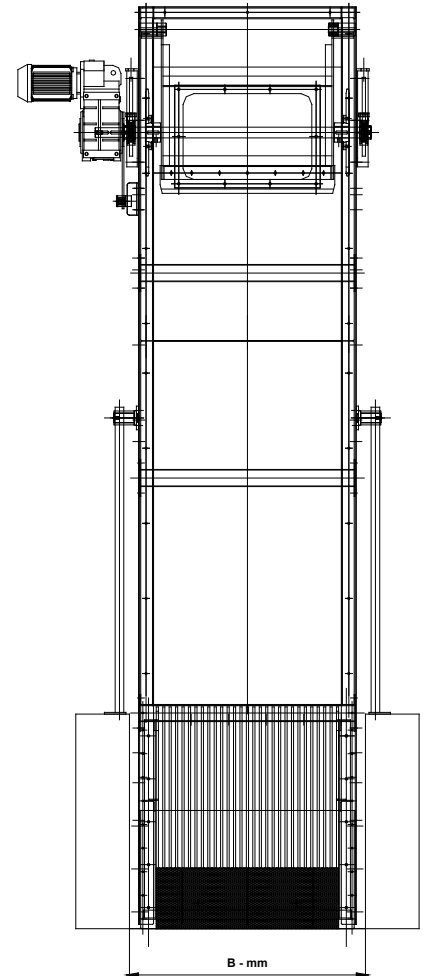
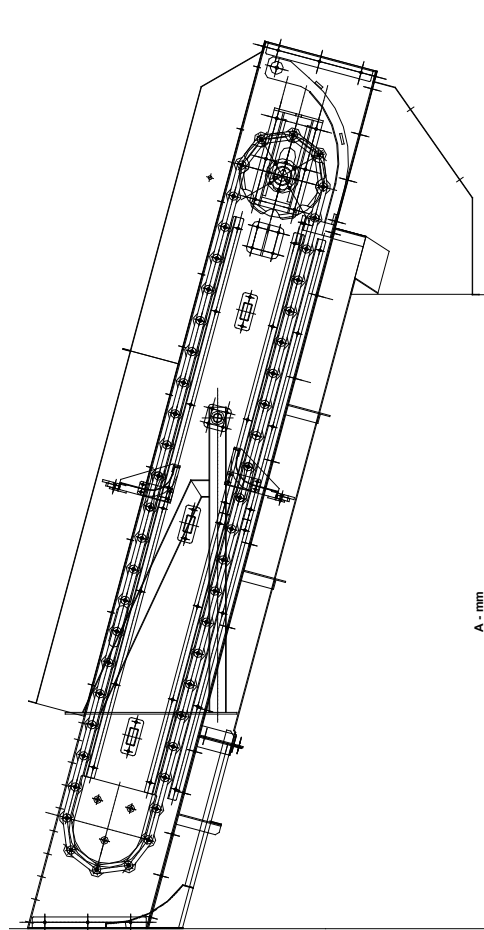
STANDARD DIMENSION DATA FOR SUBVERTICAL CHAIN SCREENS RBS

| RBS MODELS | RBS500 | RBS600 | RBS800 | RBS1000 | RBS1200 | RBS1500 | RBS1800 | RBS2000 | MATERIAL: SCREENINGS |
|------------|--------|--------|--------|---------|---------|---------|---------|---------|----------------------|
| A - mm | 2500 | 2500 | 2500 | 2500 | 2500 | 2500 | 2500 | 2500 | |
| B - mm | 500 | 600 | 800 | 1000 | 1200 | 1500 | 1800 | 2000 | |



n.b.: the manufacturer may modify some dimensions or sizes without prior information

ATTENTION THE MACHINE HERE DESCRIBED CAN BE USED IN THE INCLINED POSITION UP TO A MAX. OF 75°

**Fabricated parts material:**

*Stainless Steel AISI304 / *Stainless Steel AISI316

Panels material:

*Stainless Steel AISI304 / *Stainless Steel AISI316