

NEW

Steinhardt®
HYDROSCREEN

Wedge Wire Screen Type MECMEX®

Water protection at
CS and SS overflows



Steinhardt®
Water Technology Systems

**Wedge Filter Screen
Type MECMEX®**

The Challenge

Separate and combined sewer networks are often hydraulically overloaded during heavy rainfall and cannot transport the flow to the wastewater treatment plant. This leads to the discharge of combined wastewater and stormwater at overflow structures in the sewer network. Despite a strong mixing of wastewater with stormwater, sanitary products, paper and synthetics still find their way into receiving waters and the consequent pollution of the river vegetation is clearly visible.

The Way

Overflows can be cleaned with high performance screens in stormwater overflow structures before they pollute receiving waters. Screenings remain in the main sewer where they are transported to the wastewater treatment plant.

The Solution

The HydroScreen Wedge Filter Screen MECMEX® has been specially developed for filtering combined water and effectively retaining all solid matter larger than 6 x 6 mm (approx. 34 % SRV*, WIGAN Test**).

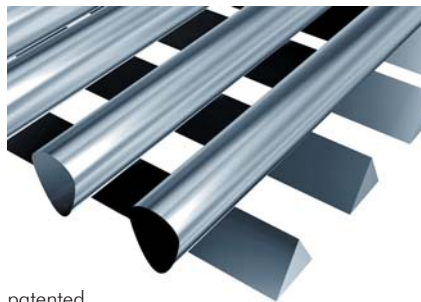
The screen can be installed in fixed position before the existing overflow edge or, if required, by means of a slide-in system for safe maintenance work from the ground.

The HydroScreen MECMEX® is manufactured as half or quarter curve with single or double overflow. It is usually positioned horizontally with the flow from bottom to top.



*SRV = Screening retention value
** National CSO Test Centre at Wigan, England, Test report No TRPM-REPO94, 2003

The HydroScreen MECMEX® is hydraulically or electrically powered and continually cleaned by brush skimmers on both sides. Because of the patented 3-dimensional form of the wedge filter screen, hydraulically optimized flows are created. This results in fewer losses and a filter saturation time approx. 10 times longer than that of normal filter screens.



patented

The Advantages

- robust, stainless steel
- brass/copper/PE bearings
- 3-dimensional wedge wire
- low hydraulic losses
- low pressure
- higher performance
- up to 1500 l/s per unit
- modular wedge wire screen system
- retrofit, expandable
- screen cleaning on both filter sides
- electric or hydraulic power
- slide-in system for safe maintenance from the ground
- approx. 34 % SRV* (WIGAN Test**)
- with level-sensor und control
- engineers support from the manufacturer
- complete with structure

Selection diagram

Description	Wedge screen dimensions [mm]	90° segment flowrate Q [l/s]	180° segment flowrate Q [l/s]
HMM100	1100 x 750/1140	210	410
HMM150	1600 x 750/1140	315	614
HMM200	2100 x 750/1140	420	819
HMM250	2600 x 750/1140	525	1024
HMM300	3100 x 750/1140	630	1229
HMM350	3600 x 750/1140	735	1433
HMM400	4100 x 750/1140	840	1638
HMM450	4600 x 750/1140	945	1845
HMM500	5100 x 750/1140	1050	2048
HMM550	5600 x 750/1140	1155	2252
HMM600	6100 x 750/1140	1260	2457
HMM700	7100 x 750/1140	1470	2867
HMM800	8100 x 750/1140	1680	3276
HMM900	9100 x 750/1140	1890	3686
HMM1000	10100 x 750/1140	2100	4100
HMM1100	11100 x 750/1140	2310	4510
HMM1200	12100 x 750/1140	2520	4919

All dimensions are approximate. The wedge screen is a modular in construction. The modules are available for one power unit in 50cm steps up to max. 3m.