

- * U.S. PATENT PENDING 12 / 214,388
- * CHINESE PATENT PENDING 200810126698.6
- * KOREAN PATENT PENDING 10-2007-0061163
- * KOREAN PATENT UTILITY MODEL REGISTERED
20-104628, 20-129369, 20-166149
20-166150, 20-166673, 20-205189

The World Best In-Channel Superfine Screen!
Never Clogged 1~5 mm Opening
No Wash water spray nor Rotating Brush!

Micro-Bar Screen



EXCLUSIVELY LICENSEE IN THE USA

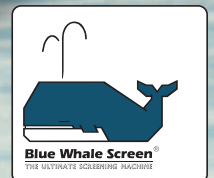
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Blue Whale Screen[®]

THE ULTIMATE SCREENING MACHINE



- * Blue Whale is the legend of screening who takes krill by screening thousand tons of water everyday.
- * ® stands for the trademark registered in Korea.

Micro-Bar Screen

“Superfine Screening” is a high-tech engineering of 10 times complicated than the coarse or fine screening in which any mechanical trouble should not occur while the 1~5mm of screen openings are kept un-clogged even in the tough circumstance of sewage treatment plants that all kinds of refuses are flowing in. However, around 10 kinds of Superfine Screens like Auto-Bar type, Step type, Drum Strainer with Screw type and the Front Face Driving or Side Face Driving Belt type Screens have been introduced recently as the need of the field is so high. But, it is common that we see some screens have to be cleaned manually by operators periodically or some are bypassing the sewage through the side of the screen frames or through beneath the screen secretly due to the clogging of the openings which is incurred due to lots of reasons within only 1~10 weeks after start up even they are equipped with some kinds of cleaning apparatus.

Micro - Bar Screen is the only screen which meets the indispensable requirement of the superfine screen that “Should never get clogged!” and over 500 sets have been installed in the municipal sewage treatment plants within recent 7 years. No wash water spray nor any rotating brush is required, but even the 1.0mm opening slits are kept always clean by the action of the amazing technology of the weld-free supported screen bars and the deep slitting rakes .

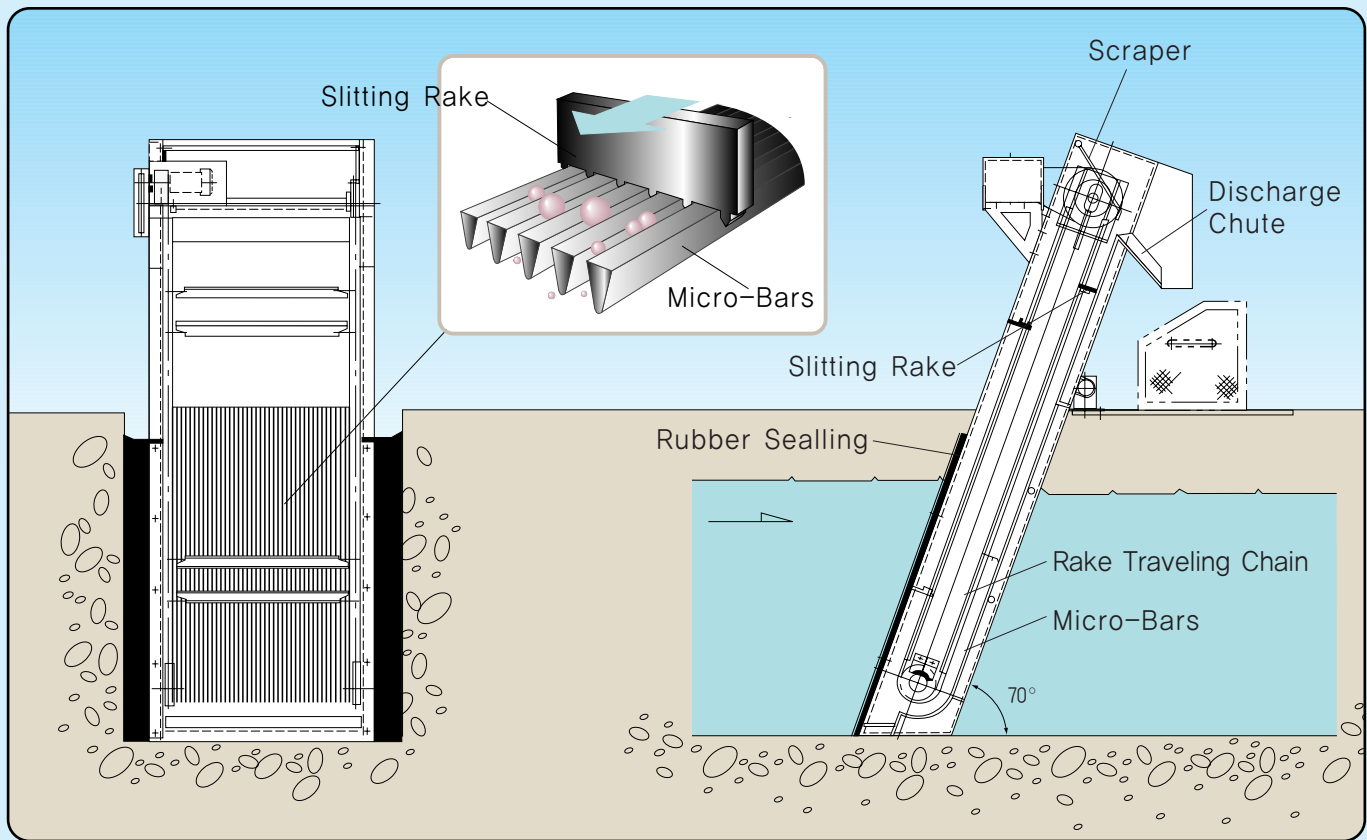
■ The 1st. Indispensable Requirement of the Superfine Screen!

Unlike the case of the coarse or fine screens conventionally used, superfine screens have very small opening ratio and moreover the openings are very easily blinded as so much small debris, which covers the openings, is in the sewage. So the superfine screens of 1~5mm openings meets the risk of overflowing as soon as the raking process of the captured screenings is stopped, and also even the clogging of some portion of the screen will cause the overflow of the sewage too. Hence, “Should never get clogged!” is the 1st. indispensable requirement of the superfine screen. However, we easily see the Perforated Drum Strainer with Screw type should be cleaned manually every week as the whole perforations are plugged with debris, and also see the Step type Screen overflows the influent sewage every morning when the flow is concentrated, due to the very slow discharge speed of the captured screenings to the top. And the case of the Wedge wire Drum Strainer with Screw type and both the Front Face or Side Face Driving Belt type Screens are showing that the screen openings get gradually clogged even the huge flow of high pressure wash water sprays are operating full-day, and the Rotating Brush for cleaning is turned into a hair-column being tangled with thousands of long hairs.

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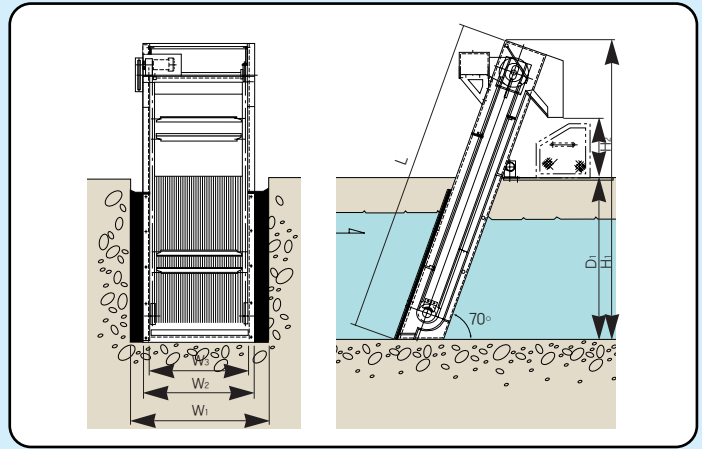
Micro - Bar Screen is developed to meet the Non-clogging, Maintenance Free operation for the duration of 10 years, and it is the only superfine screen that can stand the tough condition of the Sewage Treatment Plants. And the patented 7-state of the art technology will make it become the Global Standard of the superfine screens for the Sewage Treatment Plants.

■ Special Features of the Micro-Bar Screen



- * Durable Stainless Steel Wedge section Bars (Micro-Bars) are fixed with a special top spacer and the free support structure (Not welded) allows deep and complete slitting of the screen openings by the long teeth rakes. This enables the "Never get clogged capability of the openings!". (U.S., Chinese, Korean Patent Pending)
- * Hinge Cushioned Rake Apparatus provides instant and repeatable protection of whole mechanical parts unlike the normal motor torque limiter that should be reset whenever operated. (Korean Patent Utility Model Registered. 20-104628, 20-129369)
- * Self-Aligning Rake Access Guide makes the entry position of rake teeth match completely with the screen openings at the bottom even to the 1.0mm opening.(Korean Patent Utility Model Registered. 20-166149)
- * Self-Tensioning Apparatus of the Rake Chain makes the static tension of chain set at 0(Zero) unlike the normal tensioning. This unique apparatus prevents the high tension drive of the chain and the mechanical impact of the chain is maintained at less than 1/5 of the normal, hence the life time of the chain is extended to 3~5 times of the normal tensioning method. (Korean Patent Utility Model Registered. 20-205189)
- * UHMW (Ultra High Molecular Weight) Poly Ethylene (molecular weight of 3~6Million), which has 10~20 times of molecular weight of Normal Poly Ethylene (molecular weight of 0.1~0.4Million) is adapted as the Guide Rails for the Rake Traveling Chains. This enables the lifetime of the Rake Chain to be over 10 years by reducing the coefficient of friction with the chain rollers to less than 1/7 of the friction with the normal stainless guide rails. (Korean Patent Utility Model Registered. 20-166150)
- * Supporting Rollers are optionally adapted as the free support structure of the screen bars for some special applications. (Korean Patent Utility Model Registered. 20-166673)

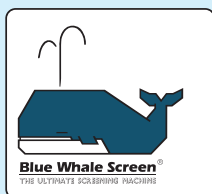
■ Dimensions of the Micro-Bar Screen



(Unit : mm)

	Channel (W1)	Machine (W2)	Screen (W3)	Depth (D1)	Length (L)	Height (H1)	Discharge (H2)	Number of Rakes	Drive (KW)		Channel (W1)	Machine (W2)	Screen (W3)	Depth (D1)	Length (L)	Height (H1)	Discharge (H2)	Number of Rakes	Drive (KW)	
MB-360	400	300	220	600	1500	1410	380	3	0.2	MB-13300	1550	1300	1200	3000	4800	4510	500	9	0.75	
MB-460	450	380	300	600	1700	1600	380	4	0.2	MB-13350	1550	1300	1200	3500	5350	5030	510	10	1.5	
MB-490	450	380	300	900	1950	1830	320	4	0.2	MB-13400	1550	1300	1200	4000	5900	5540	530	11	1.5	
MB-4120	450	380	300	1200	2400	2250	440	6	0.2	MB-13450	1550	1300	1200	4500	6400	6010	500	12	1.5	
MB-4150	450	380	300	1500	2800	2630	520	6	0.2	MB-13500	1550	1300	1200	5000	7000	6580	560	13	1.5	
MB-6100	650	550	450	1000	2400	2260	480	6	0.4	MB-13550	1550	1300	1200	5500	7500	7050	530	14	1.5	
MB-6120	650	550	450	1200	2650	2500	510	6	0.4	MB-13600	1550	1300	1200	6000	8000	7520	500	15	1.5	
MB-6150	650	550	450	1500	2950	2770	490	6	0.4	MB-16150	1900	1610	1500	1500	3250	3050	500	6	1.5	
MB-6180	650	550	450	1800	3300	3100	520	7	0.4	MB-16180	1900	1610	1500	1800	3600	3380	530	6	1.5	
MB-6200	650	550	450	2000	3500	3290	410	7	0.4	MB-16200	1900	1610	1500	2000	3800	3570	510	7	1.5	
MB-6250	650	550	450	2500	4000	3760	480	8	0.4	MB-16250	1900	1610	1500	2500	4350	4090	530	8	1.5	
MB-6300	650	550	450	3000	4550	4280	500	8	0.4	MB-16300	1900	1610	1500	3000	4850	4560	500	9	1.5	
MB-7100	850	700	600	1000	2400	2260	480	6	0.4	MB-16350	1900	1610	1500	3500	5400	5070	520	10	1.5	
MB-7120	850	700	600	1200	2650	2500	510	6	0.4	MB-16400	1900	1610	1500	4000	6000	5640	580	11	1.5	
MB-7150	850	700	600	1500	2950	2770	490	6	0.4	MB-16450	1900	1610	1500	4500	6500	6110	550	12	1.5	
MB-7180	850	700	600	1800	3300	3100	520	7	0.4	MB-16500	1900	1610	1500	5000	7000	6580	520	13	1.5	
MB-7200	850	700	600	2000	3500	3290	510	7	0.4	MB-16550	1900	1610	1500	5500	7500	7050	490	14	1.5	
MB-7250	850	700	600	2500	4000	3760	480	8	0.4	MB-16600	1900	1610	1500	6000	8100	7610	550	15	1.5	
MB-7300	850	700	600	3000	4550	4280	500	8	0.4	MB-18200	2150	1810	1700	2000	3900	3670	560	7	1.5	
MB-7350	850	700	600	3500	5100	4790	510	9	0.4	MB-18250	2150	1810	1700	2500	4400	4140	530	8	1.5	
MB-9100	1000	850	750	1000	2400	2260	350	6	0.4	MB-18300	2150	1810	1700	3000	4900	4610	500	9	1.5	
MB-9120	1000	850	750	1200	2800	2630	520	6	0.4	MB-18350	2150	1810	1700	3500	5500	5170	570	10	1.5	
MB-9150	1000	850	750	1500	3100	2910	510	6	0.4	MB-18400	2150	1810	1700	4000	6000	5640	530	11	1.5	
MB-9180	1000	850	750	1800	3450	3240	530	7	0.4	MB-18450	2150	1810	1700	4500	6500	6110	500	12	2.1	
MB-9200	1000	850	750	2000	3650	3430	520	7	0.4	MB-18500	2150	1810	1700	5000	7100	6670	570	13	2.1	
MB-9250	1000	850	750	2500	4200	3950	540	8	0.4	MB-18550	2150	1810	1700	5500	7600	7140	540	14	2.1	
MB-9300	1000	850	750	3000	4700	4420	510	8	0.4	MB-18600	2150	1810	1700	6000	8100	7610	510	15	2.1	
MB-9350	1000	850	750	3500	5250	4930	530	9	0.4	MB-20350	2350	2020	1900	3500	5500	5170	570	10	2.1	
MB-10150	1200	1000	900	1500	3100	2910	510	6	0.4	MB-20400	2350	2020	1900	4000	6000	5640	530	11	2.1	
MB-10180	1200	1000	900	1800	3450	3240	530	6	0.4	MB-20450	2350	2020	1900	4500	6500	6110	500	12	2.1	
MB-10200	1,200	1000	900	2000	3650	3430	520	7	0.4	MB-20500	2350	2020	1900	5000	7100	6670	570	13	2.1	
MB-10250	1200	1000	900	2500	4200	3950	540	8	0.75	MB-20550	2350	2020	1900	5500	7600	7140	540	14	2.1	
MB-10300	1200	1000	900	3000	4700	4420	510	9	0.75	MB-20600	2900	2520	2400	6000	8100	7610	550	15	2.1	
MB-10350	1200	1000	900	3500	5250	4930	530	10	0.75	MB-20700	2900	2520	2400	7000	9200	8645	585	17	2.1	
MB-10400	1200	1000	900	4000	5750	5400	500	11	0.75	MB-25400	2900	2520	2400	4000	6000	5640	530	11	2.1	
MB-13150	1550	1300	1200	1500	3200	3010	490	6	0.75	MB-25500	2900	2520	2400	5000	7100	6670	570	13	2.1	
MB-13180	1550	1300	1200	1800	3550	3340	520	6	0.75	MB-25600	2900	2520	2400	6000	8100	7610	550	15	2.1	
MB-13200	1550	1300	1200	2000	3750	3520	510	7	0.75	MB-25700	2900	2520	2400	7000	9200	8645	585	17	2.1	
MB-13250	1550	1300	1200	2500	4300	4040	530	8	0.75											

◆ Dimensions are subject to change without any prior notice.



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Excellent Korean Technology

Approval of Venture Business by Korea S.M.B.A.