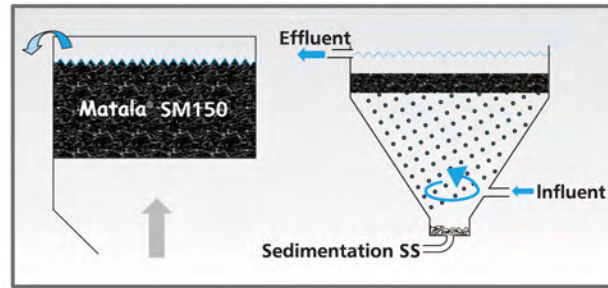
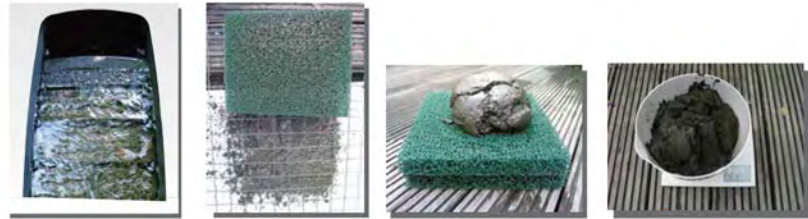


Application of Matala in sedimentation process

3-Dimensional fiber distribution, easier to capture the SS in the water.

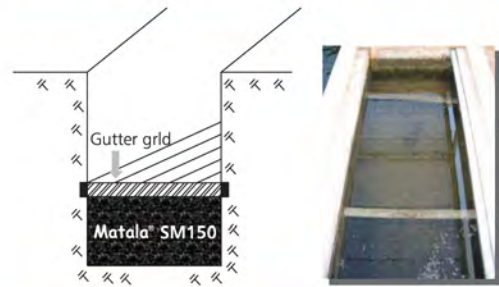


- The fibers of the 3-D Matala filter web attract particles that conglomerate into floc.
- Vast amounts of sludge can be build-up within the media before clogging occurs.
- Short intermittent aeration dislocates floc that can sediment out of the media.



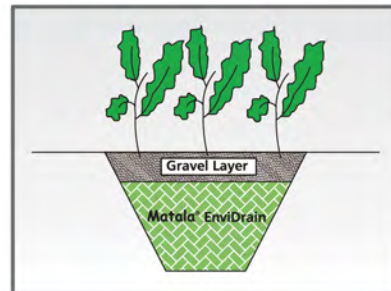
Pictures left shows 0.1m³ of SM-290 can capture the sludge 24.3kg.

Application of Matala in storm water treatment



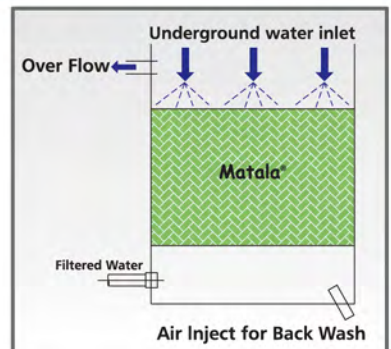
Matala can be applied in secondary storm water treatment for reduction of suspended solids.

Application of Matala in wetland



- High void space: >90%.
- High pressure load: (Envibrain panel 2cm thickness) - <30% Compression under pressure of 8920kgf/m².
- High water draining capacity.

Application of Matala in iron removal



On-Site installation (Underground water Iron Removal)

- Water Pump capacity : 2HP
- Total Matala used : 1m³
- Influent iron : 9.2ppm
- Effluent iron : 1.0ppm
- Iron Removal rate : 89% (System installed as portable iron removal filter)

SPECIFICATIONS:

Matala Type Product Code	Color	Specific surface ft ² /ft ³ , m ² /m ³	Fiber diameter inches, mm	Free volume%
SM150	Black	46 ± 3, 150 ± 10	0.0748, 1.9 ± 0.1	93
FSM190 / SM190	Black	58 ± 3, 190 ± 10	0.0669, 1.7 ± 0.1	92
FSM290 / SM290	Green	88 ± 3, 290 ± 10	0.0354, 0.9 ± 0.1	93
FSM365 / SM365	Blue	111 ± 3, 365 ± 10	0.0217, 0.55 ± 0.1	94
FSM460	Gray	140 ± 3, 460 ± 10	0.0177, 0.45 ± 0.1	94

*Product code of "FM" stands for Flex-Matala.
*The above specifications are subject to change without prior notice.

IN SHEET:

Matala Type Product Code	Color	Measurements inches, cm Flex - Matala	Measurements inches, cm Matala
SM150	Black	—	48x39x1.97, 120x100x5
FSM190 / SM190	Black	48x39x1.5, 120x100x3.8	48x39x1.57, 120x100x4
FSM290 / SM290	Green	48x39x1.5, 120x100x3.8	48x39x1.57, 120x100x4
FSM365 / SM365	Blue	48x39x1.5, 120x100x3.8	48x39x1.57, 120x100x4
FSM460	Gray	48x39x1.5, 120x100x3.8	48x39x1.57, 120x100x4

*Product code of "FM" stands for Flex-Matala.
*The above specifications are subject to change without prior notice.

IN ROLL:

Matala Type Product Code	Color	Measurement inches (cm)
FRM190	Black	Height : 6, 15 Diameter : 17-48, 43-122
FRM290	Green	
FRM365	Blue	
FRM460	Gray	

*Product code of "FM" stands for Flex-Matala.
*The above specifications are subject to change without prior notice.

IN TUBE:

Matala Type Product Code	Color	Measurement inches, cm Length: up to 86.6", 220cm
FTM190-B / TM190-B	Black	Tube A ID: 5.2 ± 0.5, OD: 10.4 ± 0.5 ID: 2.0" ± 0.2", OD: 4.1" ± 0.2"
FTM290-B / TM290-B	Green	Tube B ID: 11.0 ± 0.5, OD: 20 ± 0.5 ID: 4.3" ± 0.2", OD: 7.9" ± 0.2"
FTM365-A / TM365-A	Blue	
FTM460-A	Gray	

*Product code of "FM" stands for Flex-Matala.
*The above specifications are subject to change without prior notice.

Applications:

- Individual household wastewater treatment.
- Septic tank effluent wastewater treatment.
- Domestic sewage treatment.
- Suburban/farm village water
- Draining/infiltration.
- River purification.
- Storm water treatment.
- Industrial wastewater treatment.
- Live stock farm wastewater treatment.
- Marine habitat rehabilitation.
- Grey water treatment.
- Wetland.
- Gas and fluid contact media.
- Air scrubbing.

DISTRIBUTED BY



Matala[®]
Make water alive

MATALA WATER TECHNOLOGY CO., LTD.

http://www.matala.com.tw
e-mail: info@matala.com.tw

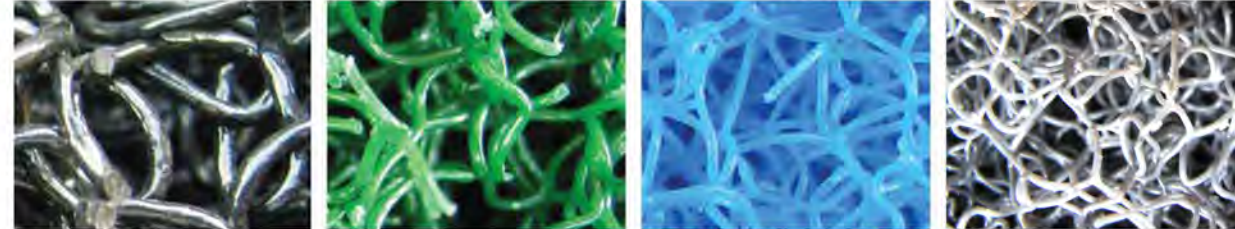
Matala[®]
Make water alive

Think Progressive !

Features & Benefits

Matala Filtration Media:

- 3-D fiber web with excellent void space (92% - 98%).
- Available with various specific surface area (120m²/m³ - 760m²/m³).
- Available with various fiber diameters (0.3mm - 1.95mm).



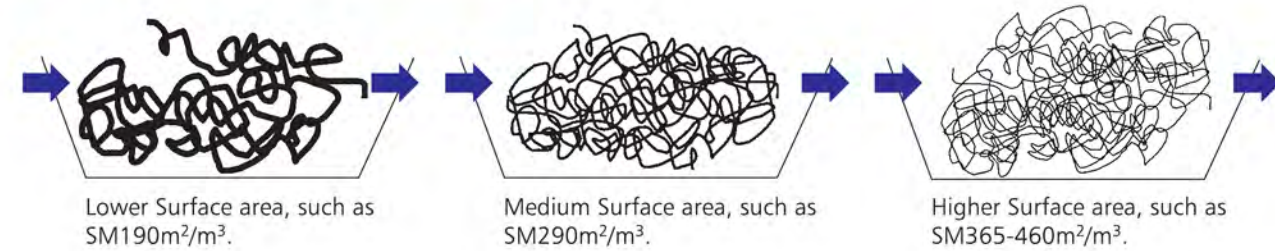
SM150 extra low density, SM290 medium density, SM365 high density, SM460 extra high density.

Working Principle



High filtration efficiency, allows for smaller / less filter tanks.

- Gentle Mixing: random fibers create micro turbulence and a 3-D flow.
- Longer Contact: a turbulent flow results in longer and intensive contact.
- Interstitial spaces enhance build-up of the biofilm.



Choice of types and densities of Matala are function of your influent water characteristics and target effluent quality. Progressive depth filtration increases the sludge holding capacity and anticipates clogging.

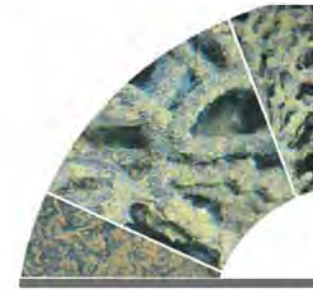
Different shapes (Sheets, Rolls, and Tubes) to fit your existing tanks or space



Application of Matala in aerobic wastewater treatment

Adding Matala in a proper volume ratio to the aerobic chamber will help:

- to stabilize biofilm.
- to reduce the final amount of sludge.
- to build the systems tolerance when influent characteristics and flow rates changes.
- to reach stable effluent quality.



Aerobic Chamber

- BOD load: 1.0 kg/m³/D.
- V(media)/V(tank) ratio: 60%.
- picture: growing biofilm.



On-Site small aerated wastewater treatment system.

- BOD load: 0.5 kg/m³/D.
- V(media) / V(tank) ratio: 47%.

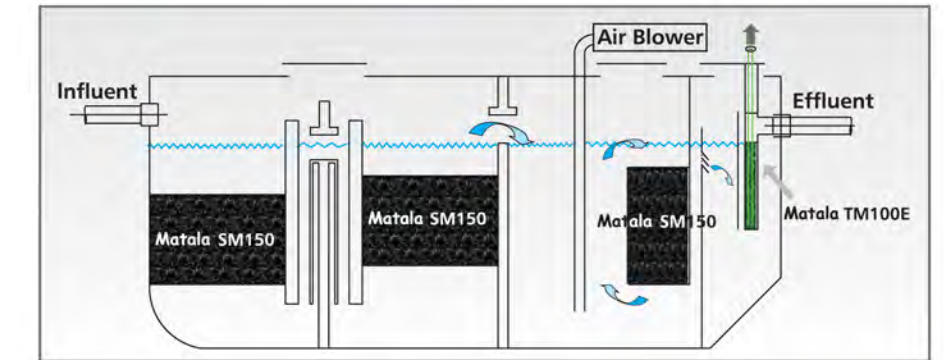
Submersed Filter Bed in Aeration Chamber.

- Effluent: BOD <6mg/l, COD: 48mg/l, SS: 4mg/l.
- TN: 2.88mg N/l, Ammonia N: 1.47mg N/l.

System installed as standard process with CE certificated by european company.

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Application of Matala in combined anaerobic and aerobic household wastewater treatment system

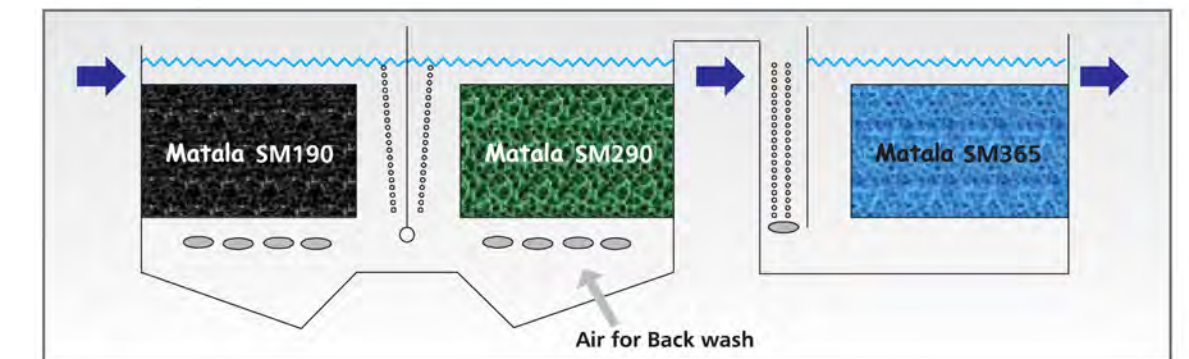


On-Site installation for individual household wastewater treatment system

- V(media)/V(tank) ratio: 40%(for Anaerobic tanks). 30%(for Aerobic tanks).
- Influent: BOD 200mg/l.
- Effluent: BOD <20mg/l, COD <30mg/l, SS:4mg/l. (System installed as popular standard process in Japan).



Application of Matala in 2nd treatment and 3rd treatment process



On-Site wastewater treatment installation for Swine farm (10,000 head of swine)

- Volume treated: 100m³/D.
- Primary treatment: active sludge
- Secondary and tertiary treatment: fixed submerged Matala bed.
- Type of Matala installed : SM190, SM290, SM365.
- V(media)/V(tank) ratio : 55%.
- Influent : BOD 89.2mg/l, COD:435mg/l.
- Effluent: BOD 51.3mg/l, COD:235mg/l.



Aerobic Chamber

