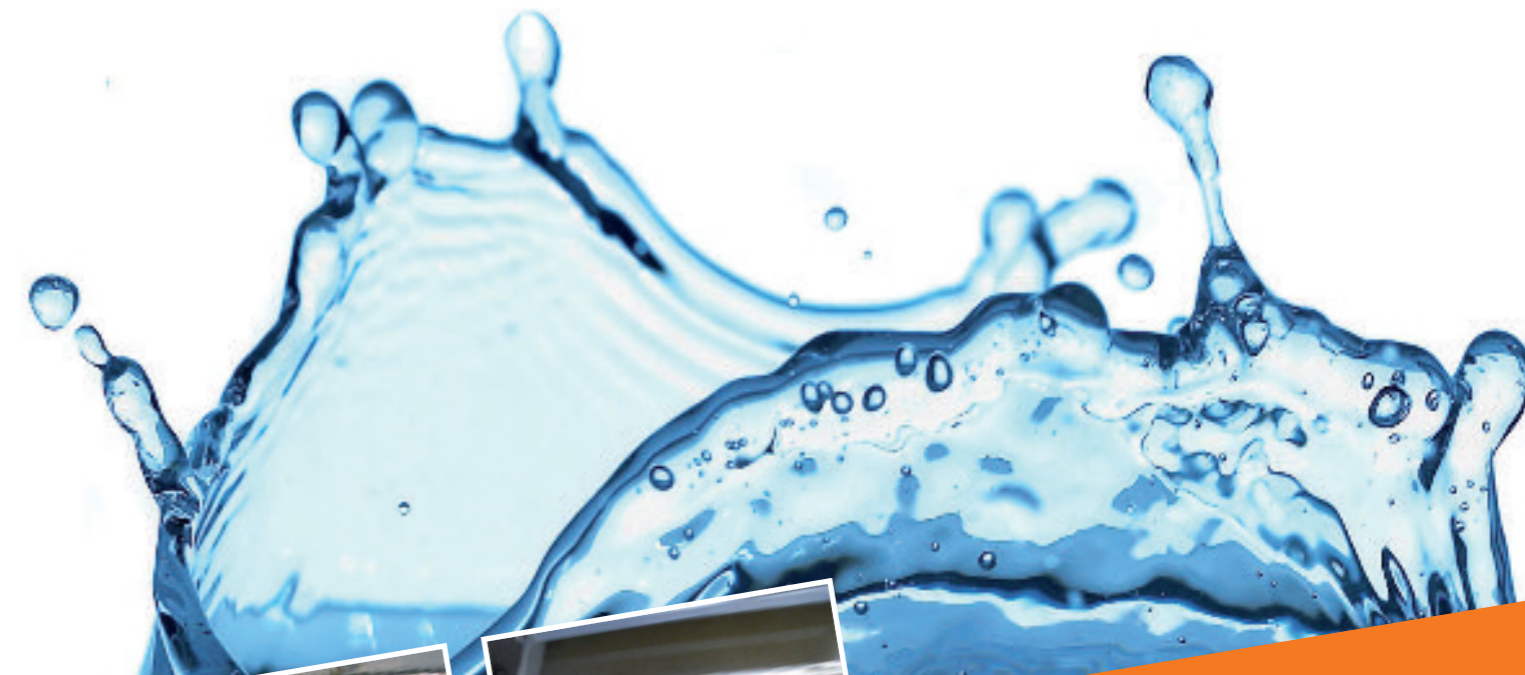




**FSM Frankenberger
GmbH & Co. KG**

Equipment for Water
and Waste Water
Inlet Works

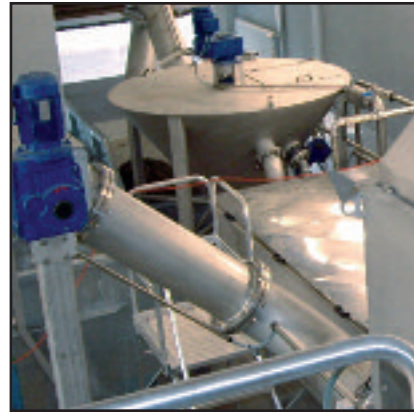


Compact
plant KSF-L



FSM Frankenberger GmbH & Co. KG
Vor dem Hohen Stein 1 · D-35415 Pohlheim/Garbenteich
Tel. +49 (0) 06404-9194-0 · Fax +49 (0) 06404-9194-91
info@fsm-umwelt.de · www.fsm-umwelt.de

FSM Compact plant Type KSF-L



Functional principle:

The waste water is pumped or flows freely into the flume of the screen, where it is cleaned. The screenings discharged, de-watered and compacted. In this process, the water flows through the screen, where coarse material is retained. The screen unit is resistant to grit and stones. FSM's proven machine components are used for the screen and the compactor.

The non-aerated grit separator is designed in accordance with DWA-Standards in respect of separation of mineral superfines. Mechanical grit conveying is achieved via a screw conveyor.

A grease trap with fine bubble aeration generating an air roller is located upstream of the grit chamber. The inlet flume extends over the whole length of the compact installation and at the same time forms the grease trap. Disk aerators connected to a blower are located at the side of the grease trap. Waste water flows from the grease trap to the grit chamber via an opening in the lower area of the

grease flume. The floating grease collects in the grease trap and is directed into a collection hopper by a scraper.

A pump removes the grease discontinuously so that it cannot get into the grit chamber.

The grit chamber is fitted with lamella technology and is designed in accordance with the German Standard DWA for non-aerated grit chambers.

It is not necessary to supply additional energy for the grit separation.

The separated grit is collected on the tank bottom. The grit is conveyed to a grit pump or a grit screw classifier by a spiral conveyor.

The installation can be provided at low cost with an emergency bypass system. For this purpose, a manually cleared screen is incorporated in the screen container and an additional connection to the outlet flume of the grit separator established. It is not necessary to use long piping with high space demand.



High efficiency - small space requirement

The FSM compact unit type KSF-L combines high efficiency with a very small space requirement. Type KSF-L is designed for flow rates of 100 l/s and higher.

For an inlet flow of 100 l/s the required area (without classifier screw) is 11.5 m².

The plants are designed in fixed sizes. A tank length of 1 m corresponds to a flow of 20 l/s. Intermediate sizes are covered by different numbers of lamellas.

The outlet trough extends over the entire tank length. This results in a low weir load with the advantage that the water is not flushed into the following processing stage.

Features:

- Optimum grit separation using lamella technology
- Short installation length
- Low operating costs due to non-aerated grit chamber
- High reliability through robust construction
- Proven machine design
- Screen and grit chamber as separate items
- Integrated emergency bypass
- Application as septage reception station possible
- Can be supplied for throughputs of 100 - 200 l/s
- Excellent performance/price ratio
- Low maintenance costs
- Machine completely hygienically encapsulated

Applications in municipal and industrial clarification plant

- waste water pretreatment / fine screening
- septage reception and treatment

Industrial applications

- meat, fish and poultry processing / slaughterhouses - pretreatment of total waste water
- composting installations, waste product and disposal engineering, seepage water treatment
- fruit and vegetable processing - pretreatment of total waste water
- fruit and vegetables - pretreatment of total waste water
- breweries - pretreatment of total waste water
- animal processing industry - pretreatment of total waste water



Dimensions: (Throughput 100 - 200 l/s)

Throughput	Screen area (LxW)	Grit chamber area (LxW)	Total area
100 l/s	1400 x 800 mm	5000 x 2300 mm	ca. 13,8 m ²
120 l/s	1400 x 1000 mm	6000 x 2300 mm	ca. 17,25 m ²
140 l/s	1400 x 1000 mm	7000 x 2300 mm	ca. 19,75 m ²
160 l/s	1400 x 1000 mm	8000 x 2500 mm	ca. 23,75 m ²
180 l/s	1400 x 1200 mm	9000 x 2500 mm	ca. 26,75 m ²
200 l/s	1400 x 1200 mm	10000 x 2500 mm	ca. 29,75 m ²

Material/make:

tank and cover	stainless steel SS304 or SS316, other materials on request
screw / spiral	stainless steel SS304 or SS316, other materials on request
wear liner	HDPE
drives	Geared motors, make SEW