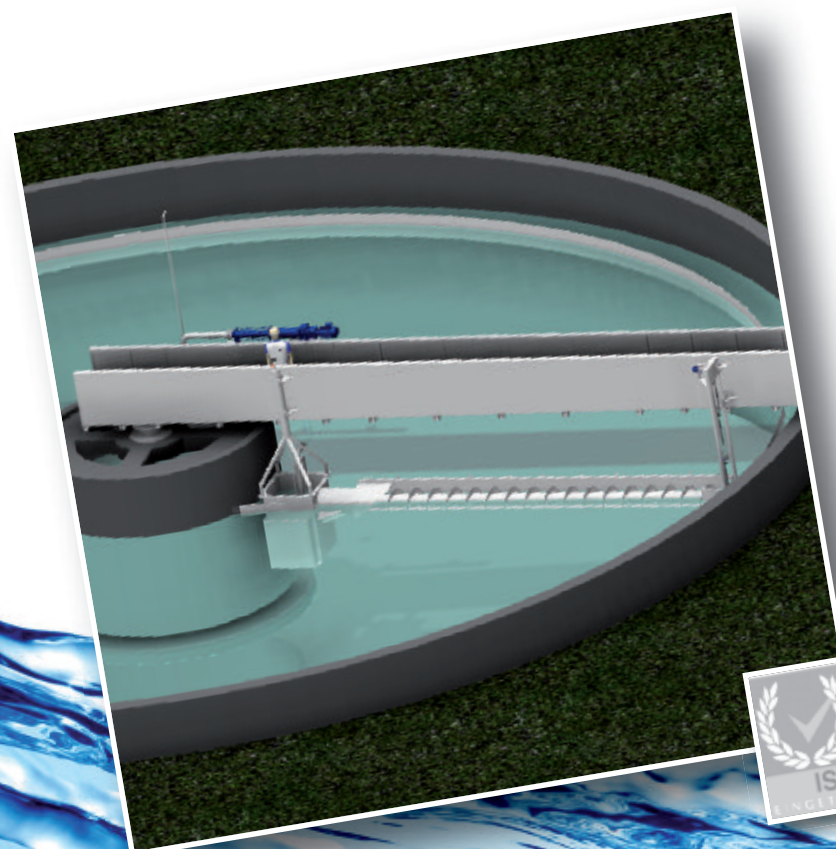




**FSM Frankenberger  
GmbH & Co. KG**

Equipment for Water  
and Waste Water  
Inlet Works



**Product line**

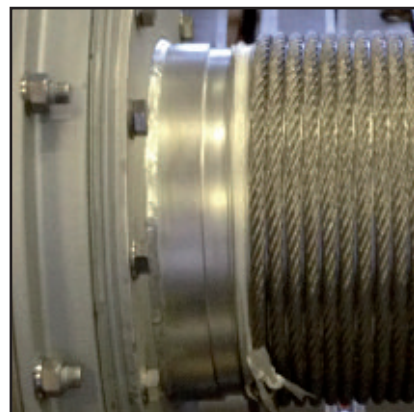
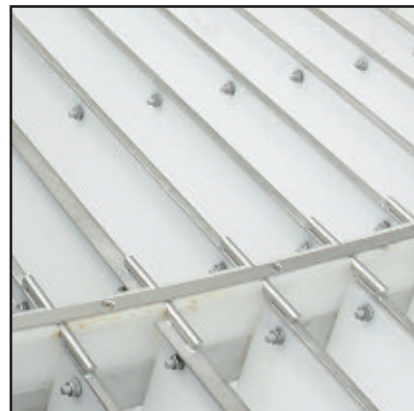
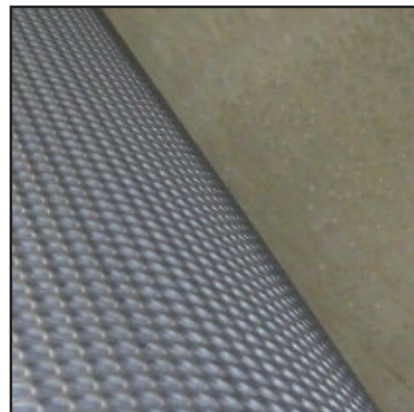


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FSM single-mindedly and continually developed a virtually complete range of products for mechanical water and wastewater treatment.



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## ■ FSM Frankenberger - Specialists in environment technology since 1970

FSM Frankenberger GmbH & Co. KG was founded in Pohlheim in the vicinity of Giessen, Germany in 1970.

During the early years, the company concentrated on the manufacture of machinery and installations for the cooling water and desalination sectors. From then onwards, FSM single-mindedly and continually developed a virtually complete range of products for mechanical water and wastewater treatment. Our customers and their diverse problems have always been at the center of our endeavors. We are constantly working to develop new solutions and further developments to our machines and processes to match the problems of our customers, in particular for the sector mechanical water and wastewater treatment.

Our highly qualified team of engineers and technicians is ready to find the best solution for your particular problem. In addition to design, production, erection and commissioning of new machines and installations, we offer a complete after-sales-service covering spare parts delivery and maintenance, including complete overhauls of machines and installation items.

**We are certified to ISO 9001:2008, underlining our quality aspirations and motivation to successively improve our performance.**

Besides our main works in Pohlheim, we have an additional manufacturing facility in Mecklenburg Vorpommern.

One of our most important markets is Germany, but during the last few years we have been able to acquire many satisfied customers all over the world. In order to look after these and new customers sustainably, FSM maintains an international network of partners.

Below you will find an overview of our products and applications which we have standardized and which serve as a guide for your investigations. In addition to these standard products, we are ready to tackle your special problems and requirements. If you do not find the product you want or need a particular variation, or if you simply have further questions, our Sales Team would be pleased to receive your inquiry.

### ■ Business sectors

- Municipal waste water
- Industrial waste water
- Cooling water in power stations
- Drinking water
- Process water
- River and seawater extraction





## Coarse and fine screening

Over the years, FSM has established and maintained a reputation for efficient, well-engineered and extremely robust screening technology. We have a wide range of screening equipment types, enabling the ideal solution for every application to be selected.



### Trash rake screen

Coarse screen for channels of large depth and width  
Application in water and waste water treatment

#### Technical data:

Channel depth:	up to 70 m - larger widths on request
Channel width:	customizable
Gap width:	up to 200 mm
Installation angle:	75 or 90°



### Grab bar screen

Coarse screen in extremely robust design  
Application in water and waste water treatment

#### Technical data:

Channel depth:	up to 20 m - larger widths on request
Channel width:	up to 8 m
Gap width:	up to 100 mm
Installation angle:	75 or 90°



### Multi rake bar screen

Coarse and fine screen  
Application in water and waste water treatment

#### Technical data:

Channel depth:	up to 50 m - larger widths on request
Channel width:	up to 6 m
Gap width:	3 - 100 mm
Installation angle:	50 - 90°



### Basket screen

Coarse and fine screen  
Application for pump protection in waste water treatment

#### Technical data:

Channel depth:	up to 15 m - larger depths on request
Channel width:	up to 1500 mm - larger widths on request
Gap width/Perforation:	6 - 100 mm
Installation angle:	90°



### Filterscreen

Fine screen with high screenings capture rate  
Application in water and waste water treatment

#### Technical data:

Channel depth:	up to 11 m - larger depths on request
Channel width:	up to 3200 mm - larger widths on request
Perforation:	2 - 12 mm
Installation angle:	45 - 75°



### Dual flow screen

Very fine screen with high screenings capture rate · Excellent protection for membrane systems · Application in water and waste water treatment

#### Technical data:

Channel depth:	up to 15 m - larger widths on request
Channel width:	up to 5000 mm
Perforation:	1 - 12 mm
Mesh Wire:	0.5 - 3 mm
Installation angle:	90° - other angles on request



### Center flow screen

Very fine screen with high screenings capture rate · Excellent protection for membrane systems · Application in water and waste water treatment

#### Technical data:

Channel depth:	up to 15 m - larger widths on request
Channel width:	up to 5000 mm
Perforation:	1 - 12 mm
Mesh Wire:	0.5 - 3 mm - other dimensions on request
Installation angle:	90° - other angles on request



### Screw screen

Fine screen · Excellent protection for membrane systems  
Application in water and waste water treatment

#### Technical data:

Channel depth:	up to 2 m , larger depths on request
Screen basket diameter:	up to 700 mm
Perforation:	2 - 10 mm
Installation angle:	35° - other angles on request



## Coarse and fine screening

Over the years, FSM has established and maintained a reputation for efficient, well-engineered and extremely robust screening technology. We have a wide range of screening equipment types, enabling the ideal solution for every application to be selected.



### Rotary drum screen

Fine screen

Application in water and waste water treatment

Technical data:

Channel depth:	up to 2500 mm
Drum diameter:	2000 mm
Perforation:	1 - 10 mm
Installation angle:	35° - other angles on request



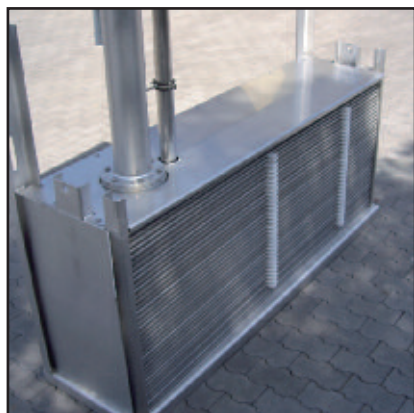
### Vertical screw screen

Fine screen

Application in waste water treatment

Technical data:

Channel depth:	up to 8 m
Screen basket diameter:	up to 700 mm
Perforation:	2 - 10 mm
Installation angle:	90° - other angles on request



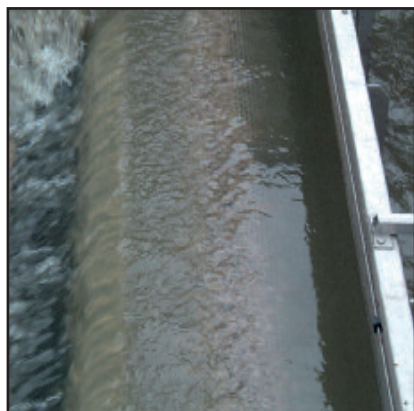
### Fine screen horizontal

Fine screen

Application in water treatment

Technical data:

Screen length:	up to 6 m - larger lengths on request
Screen height:	up to 1.5 m - larger heights on request
Slot width:	5 - 100 mm



### Strom water screen

Fine screen

Sewage water system

Technical data:

Screw diameter:	up to 1000 mm
Length:	up to 10 m - larger lengths on request
Perforation:	6 - 25 mm



### Compact screen / Septage receiving station

Fine screen with screenings wash compactor · Optimum solution for pumped inputs and cramped locations · Application in water and waste water treatment

Technical data:

Throughput:	up to 1000 l/s / 3600 m³/h
Perforation:	2 - 12 mm
Solid matter:	> 40%
Elutriation of fecal matter:	< 20 mg/g BSB5
Volume reduction:	60 to 85%



### Septage Receiving Station FK 100

Fine screen

Application in waste water treatment

Technical data:

Throughput:	up to 30 l/s / 108 m³/h
Perforation:	2 - 12 mm
Solid matter:	> 40%
Elutriation of fecal matter:	< 20 mg/g BSB5
Volume reduction:	60 to 85%





## ■ Screenings handling

The ideal extension for every FSM screen is an efficient screenings handling plant with which practically complete washing out of septage together with higher dryness and strongly reduced volume reduction can be achieved.



### ■ Screening washing press

Washing, dewatering and volume reduction of screenings  
Application in water and waste water treatment

Technical data:

Throughput:	up to 10 m³/h – larger throughputs on request
Solid matter:	up to 45%
Elutriation of fecal matter:	<20 mg/g BSB5
Volume reduction:	60 bis 85%



### ■ Compacting conveyor

Washing, dewatering and volume reduction of screenings  
Application in water and waste water treatment

Technical data:

Throughput:	up to 10 m³/h – larger throughputs on request
Solid matter:	>30%
Volume reduction:	40 - 60%



### ■ Back pressure device

Active or passive support for screenings wash compactors  
Application in water and waste water treatment

Technical data:

Throughput:	up to 10 m³/h – larger throughputs on request
Solid matter:	> 50%



### ■ Screenings cutter

Supplementary item for screenings wash compactors · Optimum use of container volume · Application in water and waste water treatment

Technical data:

Throughput:	up to 10 m³/h – larger throughputs on request
Screw diameter:	400 mm

## ■ Conveyor systems

The key to trouble-free and efficient operation is an optimized automatic conveyor system. FSM is able to use its large and varied range of solutions to deal with all conveying and distribution situations.



### ■ Screw and spiral conveyors

Conveying of practically every material · Arrangements with a variety of discharge methods, mobile and/or slewing · Application in water and waste water treatment

Technical data:

Throughput:	up to 20 m³/h
Screw diameter:	500 mm – larger diameters on request
Length:	up to 30 m – larger length on request



### ■ Laundry trough

Fluming conveyor for floating matter

Technical data:

Throughput:	up to 10 m³/h
Width:	up to 400 mm
Length:	up to 30 m – larger lengths on request



### ■ Container handling system

Machinery and installations for acceptance and movement of one or more containers. · Application in water and waste water treatment



### ■ Skip hoist system

Hoist system for vertical transport of various materials from pump stations etc.

Technical data:

Lift height:	up to 100 m – larger heights on request
Lifting capacity:	up to 1500 kg – larger capacity on request



## ■ Compact installations

FSM compact installation mounted in a stainless steel container for complete mechanical pre-clarification of waste water. Installations can be fitted with any of the FSM screens combined with one of the two compact grit separators. The grit separator can be supplemented by a grit washing installation.



### ■ Compact plant KSF-K

Conventional combined grit separator/grease trap with aerated grit chamber. Application in water and waste water treatment.

#### Technical data:

Throughput:	up to 200 l/s / 720 m³/h
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### ■ Compact Plant KSF-L

Innovative grit separator/grease trap with moving lamellar strips, finely aerated grease trap and non-aerated grit separator. Application in water and waste water treatment, small space requirement.

#### Technical data:

Throughput:	up to 200 l/s / 720 m³/h
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### ■ Grit washer unit

Solid-liquid separation from grit separator or pre-treated sewer flushing material and street sweepings with simultaneous reduction of volatile solids. Waste water treatment.

#### Technical data:

Hydraulic:	up to 40 l/s / 144 m³/h
Throughput:	up to 3 t/h solids
Growing loss:	<3%



### ■ Grit classifier

Solid-liquid separation from grit separator or pre-treated sewer flushing material and street sweepings. Application in waste water treatment.

#### Technical data:

Hydraulic:	up to 50 l/s / 180 m³/h
Throughput:	up to 3 t/h solids



### ■ Grit receiving station

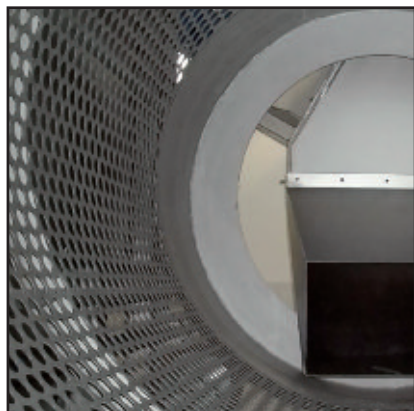
Receiving station for grit separator or pre-treated sewer flushing material and street sweepings. Can be extended to provide a complete unit for grading, waste water treatment and dewatering. Application in waste water treatment.

#### Technical data:

Buffer volume:	up to 24 m³ - greater volumes on request
Coarse screen:	any gap width, designed as fixed grid or as vibrating screen

## ■ Grit treatment

FSM grit treatment systems are amongst the most efficient and durable heavy duty equipment available on the world market. Our long experience enables us to combine individual units to produce complete installations which clean and load the grit completely automatically.



### ■ Drum screen

Grading and pre-cleaning grit separator material, sewer flushing material and street sweepings. Application in waste water treatment.

#### Technical data:

Diameter:	500 to 2000 mm
Throughput:	up to 10 m³/h - higher throughputs on request
Hole size:	2 to 40 mm - other sizes on request



### ■ Paddle mixer

For controlling the flow speed in circular sand-traps with the objective of not allowing organic matter to settle. Application in waste water treatment.