

FSM Frankenberger GmbH & Co. KG

Equipment for Water and Waste Water Inlet Works



FSM Grit classifier



The FSM grit classifier is used to separate solids from water.

The unit can be charged via air jet lift, pump or free flow.

The FSM grit classifier consists of a separating container and a screw conveyor. Application areas range from municipal sewage plant to separation of sediment and heavy materials in production and process waste water in the chemical, food, paper and waste disposal industries. The grit separator provides high performance coupled with low operating costs.

Functional principle:

Inflow of the grit/water mixture can be either under pressure or via gravity line. The tangential feed induces a rotary movement in the water which causes (Type SK) the heavier substances such as sand to sink to the apex of the tank, where they are removed and dewatered via the screw conveyor. The grit is thus rendered substantially free of organic matter.

The grit classifier Type TSK is feeded from the top with the grit water mixture.

The FSM grit classifier effects a continual separation of the grit from the waste water flow while reducing the organic portion of the solids and dewatering the grit.

Features:

- High reliability through robust construction
- If required, the grit separator can be constructed so that conversion to a a grit washer can be carried out at a later date.
- The unit can be extended to include an input station for channel grit and street sweepings.
- Feed rate of up to 50 l/s possible.
- Excellent cost/performance ratio
- Low maintenance costs
- Suitable for outdoor sites / operation in winter
- Easily adapted to suit changed operating conditions
 - Machine completely hygienically encapsulated
 The FSM grit classifier has proved itself in practice at

home and abroad.





Applications in municipal and industrial clarification plant

- waste water pre-treatment / grit treatment
- grit dewatering
- classification
- circular degritter installations up to 30 l/s infeed

Industrial applications

- meat, fish and shellfish processing / slaughterhouses preliminary clarification of total waste water
- sugar industry preliminary clarification of total waste water
- fruit and vegetable processing preliminary clarification of total waste water
- breweries preliminary clarification of total waste water
- animal meal production preliminary clarification of total waste water
- compost installations, waste product and disposal engineering, household and industrial refuse, garden refuse and compost, seepage water treatment
- machinery industry metal swarf conveying
- glass and ceramic industry

Dimensions:

Typ SK	
length/width/height	5200 / 2200 / 3120 mm, other dimensions on request
throughput	up to 40 l/s, other throughputs on request
Typ TSK	
length/width/height	6700 / 2100 / 3500 mm, other dimensions on request
throughput	up to 50 l/s, other throughputs on request

Material/make:

machine frame	stainless steel SS304 or SS316, other materials on request
conveyor screw	special steel or stainless steel SS304 or SS316, other materials on request
drives	geared motors, make SEW