Germaniastraße 28
44379 Dortmund
(0231) 61009-0

Postfach 700110
44371 Dortmund
www.gefa.com

GEFA PROCESSTECHNIK GMBH

Lackeby Drum Screen

Series RS

Data Sheet

Stand 02.2018

Filtertechnik

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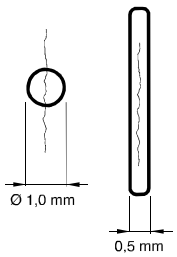
General

Lackeby Products manufactures, markets and sells Roto-Sieve® drum screens, which separate solid particles and fibres from liquids by screening. The drum screens are based on proven technology with a self-cleaning function that delivers very good results and minimises maintenance. With high operational reliability, a long service life and low energy consumption, Roto-Sieve® drum screens are a proven good investment.

Due to its internal feed and circular perforations, Roto-Sieve® offers the best separation that can be achieved mechanically. It has been shown in practice that a fibre or hair has a very small chance of orienting itself at a right angle and against the water current, so that it can pass through a round hole.

Technical features

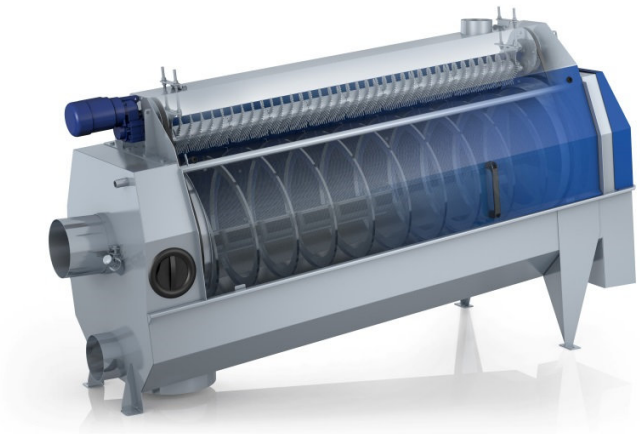
- Low energy consumption
- High degree of separation
- High operational reliability
- Good utility in many applications



The diagram shows a circular hole with Ø 1.0 mm on an internally-fed Roto-Sieve® drum screen, compared with a 0.5 mm opening along the drum's rotating direction on an externally-fed screen.

Process benefits

- Enhances processes, for instance in treatment works
- Reduces need for cleaning
- Makes servicing easier
- Reduces running costs of subsequent stages



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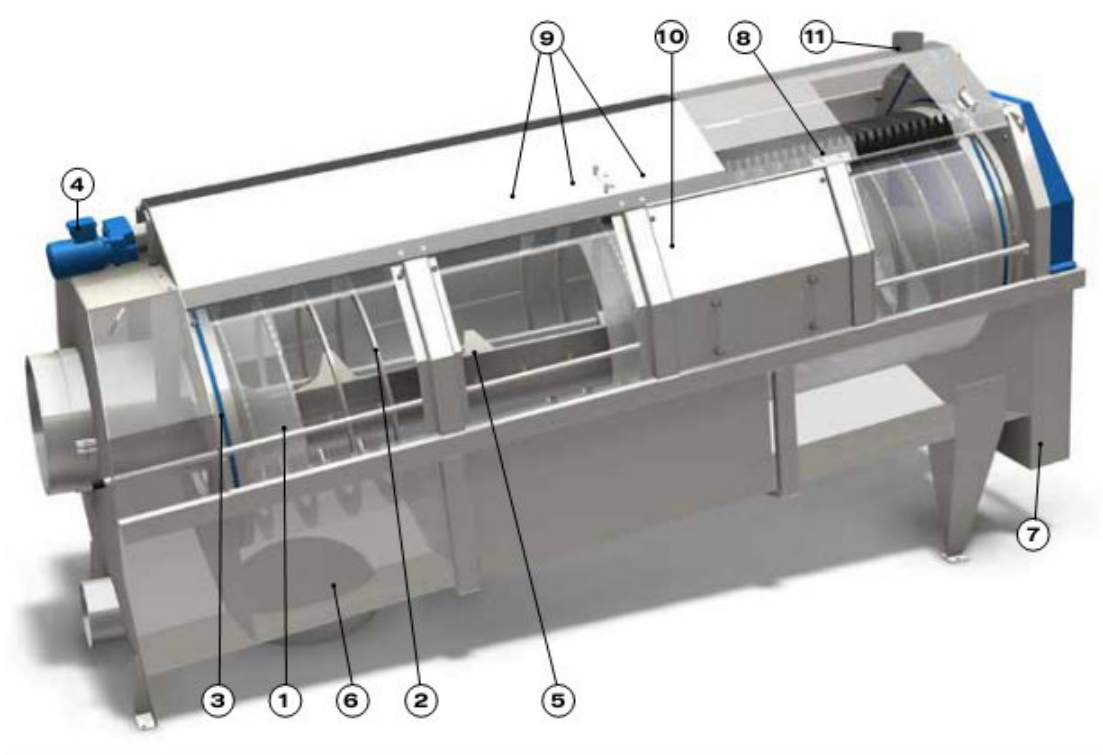

Function

Roto-Sieve® drum screens consist of a perforated drum **(1)** with internally fixed screw **(2),** which transports the separated particles out of the drum. The drum rotates by drive belts **(3)** and is driven by a cog gear motor **(4).** Incoming liquid is fed into the drum through an inlet pipe **(5)**, which distributes the water over a large area of the drum's interior. During passage through the drum, the liquid is screened through the drum's perforations and collects in the trough **(6)** underneath. Separated particles are transported out of the drum through the screenings outlet **(7)**. Dewatering continues throughout transport in the drum.
To prevent clogging of the unit's perforations, all drum screens are fitted with a rotating brush **(8)** and a spray header with spray nozzles **(9).** Roto-Sieve® drum screens are completely encased in removable splash guards **(10)** and equipped with a ventilation exhaust **(11)** to improve the working environment.

General safety instructions

	To prevent accidents, the installation, connection and commissioning of the electrical components may only be carried out by authorized and qualified personnel.

	**Note:** 1. The flush volume is added to the flow volume. 2. When installed in open air, the filter must be protected from frost.

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Product-details

Drum Screen RS	Unit	RS-11	RS-22	RS-24	RS-36	RS-48	RS-412	RS-416
Capacity [1]	max. l/s	9	32	95	135	207	290	435
Drum perforation	Ø mm	0,6–10,0	0,6–10,0	0,8–10,0	0,8–10,0	0,8–10,0	1,0–10,0	1,0–10,0
Length	mm	1210	1820	2815	2900	2950	3930	4950
Width	mm	600	960	960	1250	1600	1600	1600
Height	mm	1020	1445	1550	1950	2330	2395	2500
Gross weight	kg	165	350	500	710	1020	1300	1470
Net weight	kg	115	230	320	570	880	1205	1350
Working load [2]	kg	135	260	350	615	1090	1440	1610
Inlet pipe	Ø mm	124	250	250	300	404	506	606
Outlet pipe [3]	Ø mm	150	250	400	500	500	604	704
Overflow outlet pipe	Ø mm	---	200	200	250	404	404	404
Drum rotation	rpm	29	18,2	18,2	18,2	9,1	9,1	9,1
Spray header conn.	ISO	G ¾“	R 1“	R 1“	R 1“	R 1“	R 1“	R 1“
Spray water pressure	bar	4-6	4-6	4-6	4-6	4-6	4-6	4-6
Spray water consumption	l/min	23	22	49	36	32	51	70
Entering angle	°	6	6	6	6	6	6	6
Max. Inlet velocity	m/s	0,78	0,67	2,0	1,9	1,65	1,48	1,54
Rated power	kW	0,25	0,37	0,37	0,55	1,1	1,1	1,1
Rated current (230/400V)	A	1,32 / 0,76	1,89 / 1,09	1,89 / 1,09	2,44 / 1,41	4,12 / 2,38	4,12 / 2,38	4,12 / 2,38
Efficiency class		IE1	IE1	IE1	IE2	IE3	IE3	IE3
Protection		IP55	IP55	IP55	IP55	IP55	IP55	IP55
Material								
Screen	EN 1.4301 (EN 1.4404 on request)							
Side cover	GRP EN1.4301 EN1.4404	- S O	S O O	S O O	S O O	S O O	S O O	S O O
Screening outlet cover	GRP							
Brush	Heat resistant							
Spray nozzles	Brass (EN 1.4404 on request)							

S = Standard O = Optional

[1]) Wastewater with a SS-load of 200 ppm and Ø 2.0 mm perforations.
Flow speed reducer is recommended at high capacities.
[2]) Static weight with drum filled to the overflow level.
[3]) Sized for unrestricted gravity discharge.

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GEFA Certification

ISO 9001 - OHSAS 18001 - ISO 14001

Zusätzlich zum Qualitätsmanagementsystem **ISO 9001** hat die GEFA Processtechnik GmbH jetzt auch für die Bereiche Arbeitsschutz (**OHSAS 18001**) und Umweltmanagement (**ISO 14001**) ein sichtbares Zeichen:

Die **OHSAS 18001** und **ISO 14001** Zertifizierungen sind weltweit anerkannte Standards mit dem Fokus auf Personenschutz, Arbeitssicherheit, Gesundheitsvorsorge und Umweltschutz.