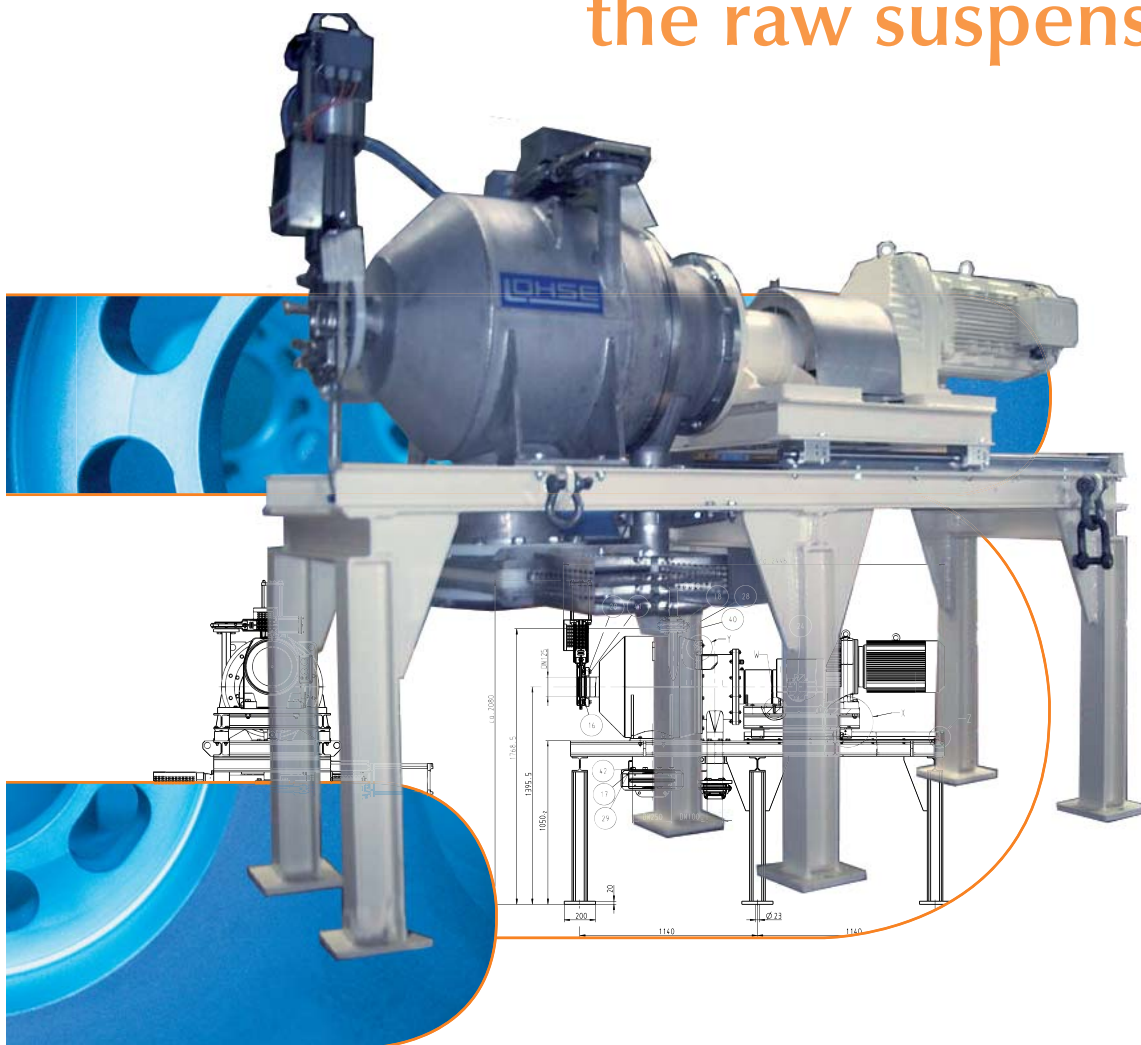


Mechanical Engineering

Rejector

to purify and
disintegrate
the raw suspension



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Application

The rejector is used as a sieving machine and serves to purify and disintegrate the raw suspension from waste pulping units or storage containers.

Construction and function

The raw suspension is intermittently fed to the centre of the rejector. The rejector is a closed cylindrical container with a central disintegrator wheel to which a sieving unit is flange-mounted.

The disintegrator wheel installed in the container causes a pronounced rotational movement, which causes a disintegration of the raw suspension. The raw suspension which has been thus disintegrated flows through the sieve unit and is extracted by means of an upstream pump. Particles which are larger than the perforations of the sieve remain in the container and are held back.

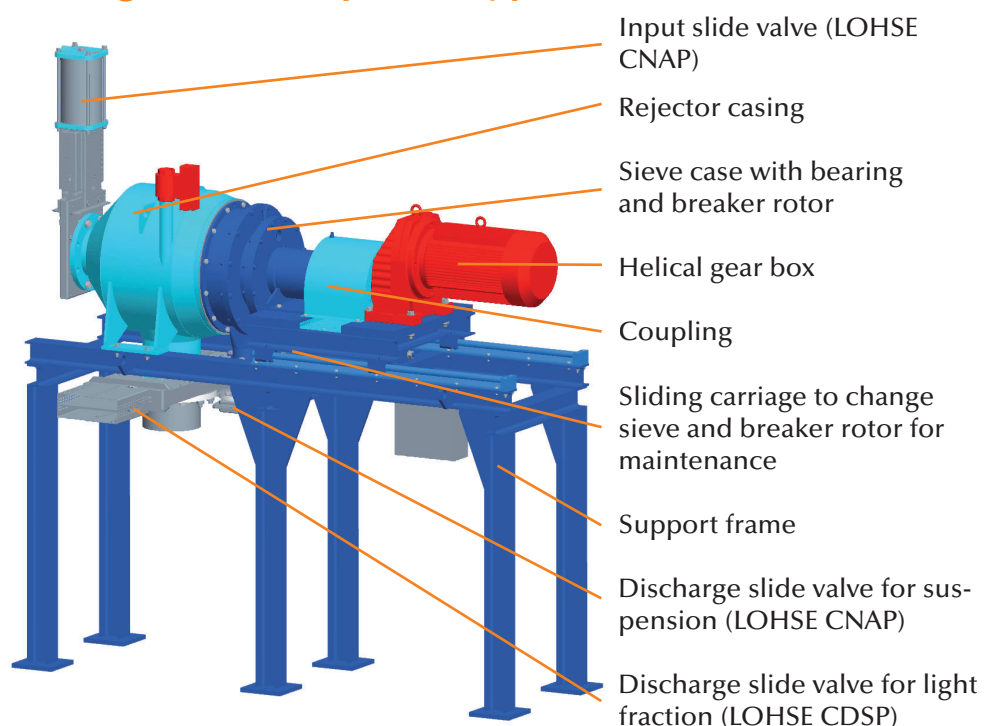
After a time, which can be adjusted, the foreign particles in the container become more concentrated. By the addition of flushing water, the fraction of foreign particles remaining in the container (material to be sieved) is washed out. After this, by opening a slide valve which is attached to the base of the container by means of a flange, the remaining contents in the container (the foreign particles) are removed from the rejector. Once the material to be sieved has been removed from the rejector, a new cycle begins.

Foreign bodies (cutlery, steel parts, stones, textiles, plastic film etc) remain in the container and are not forced through the sieve.

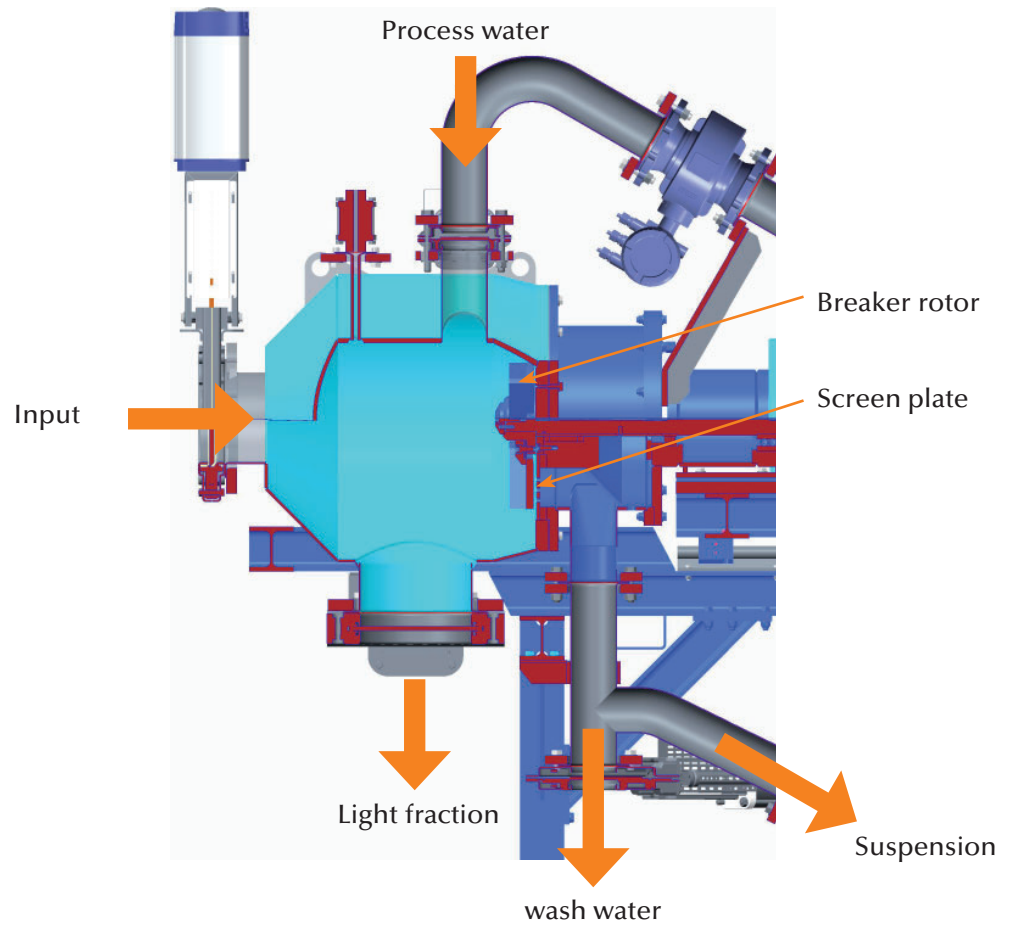
Advantages

- less cost for wearing parts.
- lower energy consumption
- simple adaptation to various types of waste
- prevention of clogging of the following units due to clogging of rotating parts (macerator, agitators, etc.)
- possibility by washing the contaminants more organic material in the fermentation suspension
- low content of organic matter in the contaminant fraction
- low level of contaminants in the fermentation suspension due to gentle screening
- minimize the formation of floating debris by separating the light contaminants in the rejector

Main components using the example of type F04



Function using the example of type F04



- Mailing of the raw suspension coming from the pulper or acceptance tank
- Separation the light fraction from raw suspension (plastic, wood, textiles) and other rest impurities (bones, metal, stones)
- Particlesize in accordance with hygienisation rules, stock preparation



Technical data

Type		F04	F10	P20
Throughput paper pulp TS 4–6%	m ³ /h	18	48	100
Throughput leftover TS 10–18%	m ³ /h	3–17	15–30	–
Useable volume tank	dm ³	180	1000	2000
Tank diameter	mm	650	1200	1500
Impeller diameter	mm	410	950	960
Perforation	mm	4,2 – 12	4,2 – 12	5 – 10
Intake nozzle	mm	DN 125	DN 250	DN 350
Accepted stock nozzle	mm	DN 100	DN 20	DN 350
Reject discharge light fraction	mm	–	–	DN 250
Reject discharge light and heavy fraction	mm	DN 250	DN 500	DN 400
Flush water nozzle	mm	DN 50	DN 50	–
Speed impeller	1/min	555	322	380
AC motor	kW	22/30	45	90
Material tank		1.4571	1.4571	1.4571
Material support, frame (not in touch with medium)		S235JR painted	S235JR painted	St 37-2
Operating weight (filled)	kg	approx. 1700	approx. 4000	approx. 9500
Tare weight	kg	approx. 1400	approx. 3100	approx. 7500

