



## LACKEBY GRIT WASHER

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# Highly efficient grit and sand classification with organic removal in world class quality

Because of its performance, long lifetime, low energy- and water consumption, Lackeby's Grit washer is a worthwhile investment. It is designed to separate grit or other types of sedimentary particles as well as it washes out most of the organic content. The simple design which normally is supplied without any agitator, ensures high reliability and long technical service life, while maintenance requirements are kept to a minimum.

### Applications

- Grit and sand washing and separation (municipal)
- Separation and washing of any high-density particles from process or waste water (Industry)

# When high efficiency, low costs and reliability are the priorities.

The incoming water, which normally comes from a grit chamber, is led into the side of the conical tank through the inlet. The media is then by cyclonic effect separated in the means that the water is overflowing to the outlet located at the same level as the inlet and the sedimentary particles are sinking. The tank walls slope steeply to avoid the risk of bridging. When the grit and sand has settled, the washing is done by flushing water through rubber nozzles located in optimal positions in the settling tank section. The organics are then flushed out by opening the valve located at the outlet for organic content. All classified material like grit and sand or any other sedimentary particles are finally transported out via a shaft-less pulling spiral for maximum dewatering. This shaft-less spiral reduces the need for maintenance, as there is no bearing at the bottom of the through.

## Technical Data

Models		156	220	260
Max. media capacity	l/s	7	13	25
Grit separation capacity (std setting)	kg/h	150	150	350
Surface area	m <sup>2</sup>	0.69	1.21	2.16
Tank volume	m <sup>3</sup>	0.26	0.50	1.34
Length	mm	3742	4285	5255
Width	mm	1255	1667	1972
Height	mm	2284	2583	3210
Net weight	kg	455	520	1017
Gross weight	kg	895	1180	2057
Drive motor. rated power	kW	0.25	0.55	0.75
Drive motor - rated current at 230/400V	A	1.32 / 0.76	2.44 / 1.41	3.10 / 1.79
Media inlet connection		DN 100 / PN 6	DN 125 / PN 6	DN 150 / PN 6
Water outlet connection		DN 125 / PN 6	DN 150 / PN 6	DN 200 / PN 6
Organic outlet connection		DN 100 / PN 6	DN 100 / PN 6	DN 100 / PN 6
Grit outlet connection (outer)	Ø mm	218	218	324
Wash water connection	ISO	DN 20	DN 20	DN 20
Recommended wash water pressure	bar	4-6	4-6	4-6
Wash water consumption at 4 bar <sup>1)</sup>	l/min	30-35	30-35	35-45

<sup>1)</sup> During washing sequence

### High performance:

- Simple washing function reduces the organic content to below 3%
- Up to 95% separation of sedimentary particles from the water
- Maximises dewatering which normally is above 90% DS content
- Minimises maintenance
- Protects the downstream process from abrasive material.

### Low cost:

- Robust design normally gives more than 20 years lifetime
- Low energy consumption (only one drive system)
- Low degree of maintenance due to few moving parts.

### Design simplicities:

- No need for agitator to remove the organic fraction
- Shaft-less screw conveyor for outfeed of dewatered material
- Without bearing at the bottom end of the conveyor.

Lackeby Products AB has more than 50 years of experience in designing and manufacturing high performance products for resource-efficient heat recovery and wastewater recycling. In our production facilities in Sweden we have made thousands of products for the toughest environments world wide.

We are well known for our ability to customize products to each customer's unique requirements. All of our products are characterized by reliability, long life cycles and easy maintenance making Lackeby Products a trusted partner and supplier of products for plant upgrades or new plant constructions. We guarantee high quality, excellent performance and complete satisfaction.



#### Lackeby Products AB

Contact details: Phone: +46 480 770 100 | www.lackeby.com

Visiting address: **Kalmar** | Torsåsgatan 5F | SE-392 39 Kalmar | Sweden  
**Kungälv** | Bultgatan 28 | SE-442 40 Kungälv | Sweden