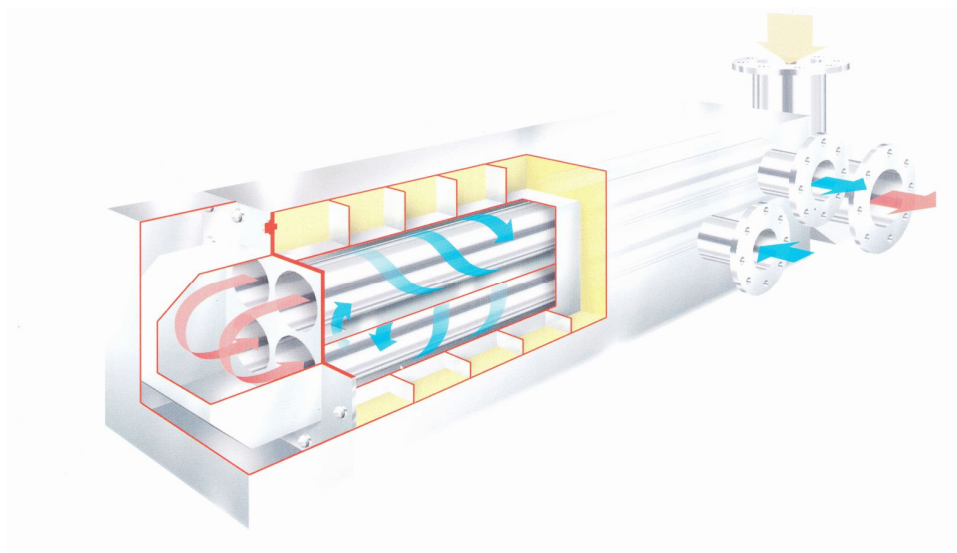


Läckeby heat exchangers sludge - water technical data sheet



Heat exchanger units sludge/water from Läckeby are combining innovative thinking with 40 years of experience in this area. This unit has been developed to meet the specific requirements for the heating or cooling of sludge. The unique patented design provides a compact unit with minimal maintenance requirements.

Function

The heat exchanger units sludge/water are based on a modular principle with circular sludge channels, allowing to adapt the design to each plant's unique conditions. The channels provide a large throughput area, with low pressure loss and minimal risk of clogging. Each level of sludge channels is surrounded by a rectangular water circuit, allowing heating or cooling water to circulate in the opposite direction of the sludge.

The unique, patented open turning chamber contributes to a compact and easy to install design. Inspection, disassembly and maintenance are very simple to carry out, because the turning chambers are mounted on a common flange. The turning chambers provide even higher heat transfer, by equalizing the sludge's temperature profile. Based on a modular principle and patented turning chambers, the compact design stands for low operating costs. Therefore, the Läckeby heat exchanger unit will prove to be a good investment.

Technical features

- Unique design, specifically for sludge
- Patented turning chamber
- Compact and easy to install unit
- Simple inspection and maintenance
- High heat transfer
- Large throughput area

Process benefits

- Enhances efficiency of digestion and hygienization
- Equalizes the temperature profile of the sludge
- Easier maintenance and eliminates problems with multiple flanges and loose connections
- Reduces pressure losses
- Minimizes risk of clogging

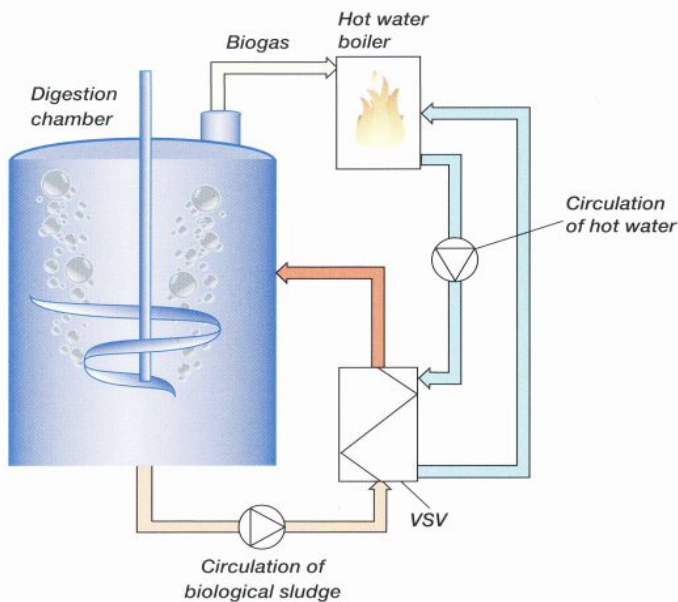
Environmental Engineering

Design

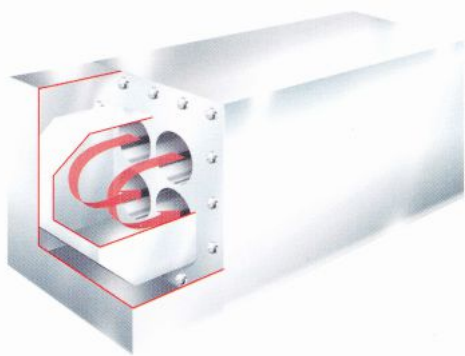
The heat exchanger unit sludge/water is a compact design with circular sludge channels based on a modular principle and patented turning chamber. As a standard, the heat exchanger unit is made of stainless steel.



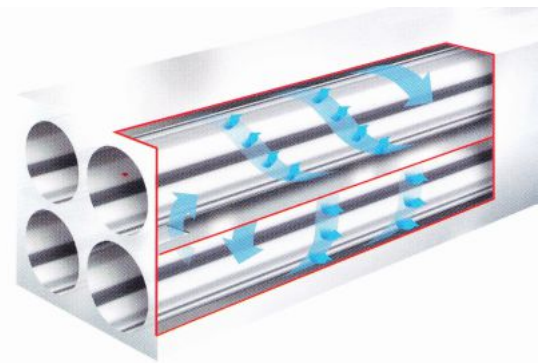
Heat exchanger sludge/water and heat exchanger unit sludge/sludge from Läckeby installed in Älmhult, Sweden



	Example VSV 80	Example VSV 40
Sludge flow	73 m ³ /h	6 m ³ /h
Temp inlet sludge	55,00 °C	5,0 °C
Temp outlet sludge	55,6 °C	31,00 °C
Hot water flow	12 m ³ /h	8 m ³ /h
Temp inlet water	68,0 °C	75,0 °C
Temp outlet water	64,1 °C	55,0 °C
Heat transfer	55 kW	183 kW



The turning chamber, patented by Läckeby, facilitates a compact design and makes disassembly and maintenance routines easy.



Hot/cold water circulates around the sludge pipe in a rectangular pressure vessel.

Läckeby develops, designs and manufactures heat exchangers. Coordinated expertise and production ensures high quality service and delivery. Läckeby can also participate and assist as from the planning stage and take on responsibility for everything from dimensioning to installation. Through our involvement at the planning stage, we can offer a total process guarantee.

References :

Since the nineties, Läckeby has supplied over 700 heat exchanger units sludge/water and heat exchanger units sludge/sludge to municipal and industrial plants worldwide.



Task Environmental Engineering is your contact for the Benelux countries (Belgium, the Netherlands and Grand-Duchy of Luxembourg) concerning the Läckeby heat exchangers