

# E2E anaerobic reactor The reactor tailored to your needs



# Maximum retention rates, optimum performance

Efficient, cost-optimized anaerobic wastewater treatment is characterized by a high degradation rate and operational reliability. The Voith E2E anaerobic reactor impresses with its patented three-phase modular settler system which achieves the highest retention rates for valuable anaerobic biomass in the industry.

The fluidized bed reactor is used for anaerobic treatment of diluted, low-calcium industrial effluent. Thanks to the special settler design, which is tailored to the specific requirements of the wastewater, the E2E anaerobic reactor covers a wide COD concentration range (1,500 - 50,000 mg/l). External recirculation keeps the hydraulic conditions in the reactor constant.

Due to the adjustable settler modules, the reactor can be operated with both granular as well as flocculent anaerobic sludge.

## Your benefits

- + Highest retention rate in the industry
- + Reduced investment costs thanks to flexible design and structural form of the tank
- + Can be used for a wide range of COD concentrations
- + Robust distribution system enhances runability
- + Minimum consumption of caustic soda due to low installed height
- + No odor emission
- + Easy to use and maintain

### Tailored tank geometry reduces your costs

Thanks to the modular honeycomb design of the settler, the reactor volume can be used optimally and a lower design is possible compared with conventional EGSB models. The standardized sizes allow investment costs to be reduced. Moreover, the design can be adapted to the requirements of various tank geometries.\*

### **Smooth operation**

The reactor concept also impresses through its robust distribution system that avoids clogging thanks to individually adjustable nozzles. The produced biogas is collected in the headspace of the reactor. In the system, the gastight design of the reactor prevents any odor emission.

### Areas of application

The E2E anaerobic reactor is used for anaerobic wastewater treatment in the following industries:

- Food
  - Breweries
  - Dairies
  - Soft drink production
  - Juice production
  - Fruit and vegetable processing
  - Potato processing
  - Confectionary industry
- · Paper and pulp
  - Pulp production
  - Mechanical pulp production
  - Paper manufacturing

### The modular honeycomb concept\*









- Honeycomb settler
- □ Tank

# Technical data E2E anaerobic reactor

Water height [m]	11	13
Diameter [m]	Active reactor volume [m³]	
4.3	160	189
6.5	356	431
7.5	486	574
9.5	780	921
11.5	1,045	1,235
13.5	1,575	1,861
15.5	2,076	2,453



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# **Further Information**











