



**FINSTERWALDER
UMWELTECHNIK**

EXTREMELY RELIABLE

Continuous collection and removal of sinking contaminants from anaerobic digesters

**SELF CLEANING DIGESTER
- SEDIMENT REMOVAL**



www.fitec.com



CLEANING OF DIGESTERS DURING OPERATION

The sediment removal system allows for the continuous collection and discharge of sinking contaminants from the digester floor. This system consists of a patented mechanical floor scraper, a grit pump and a sediment (solid / liquid) separator.

A COMMON PROBLEM IN ANAEROBIC DIGESTION PLANTS

Sediment enters from contaminated organic wastes and accumulates on the digester floor. This leads to sediment build up and the following problems:

- » A decrease in the effective digester volume (retention time) > biological problems
- » Damage to mechanical equipment like pumps, agitators, etc.
- » Downtime and expensive cleaning of digesters

The SOLUTION: FINSTERWALDER SEDIMENT REMOVAL SYSTEM

- » Sediment buildup is avoided by the regular and fully automated action of the double arm floor scraper.
- » Maintains a consistent digester volume > stable biological system
- » Protection of mechanical equipment
- » Interruption free operation during the cleaning cycles of digester floors

TECHNICAL DATA

of the FINSTERWALDER floor scraper

- » Suitable for digesters without a center column up to 18 m in diameter and 20 m in height
- » Suitable for operation in explosion zones
- » Floor scraper shaft is sealed gas tight up to 20 mbar
- » Driven by a slow-moving planetary gear box
- » Very low power consumption: 0.55 kW

of the FINSTERWALDER sediment separator

- » Maximum sediment/grit content: 4.0 m³
- » Container dimensions (L x W x H): 5.7 m x 1.5 m x 3.6 m
- » Critical parts are made of stainless steel
- » Total weight: approx. 3,200 kg
- » Simple control and easily accessible

SINGLE COMPONENTS



Floor scraper



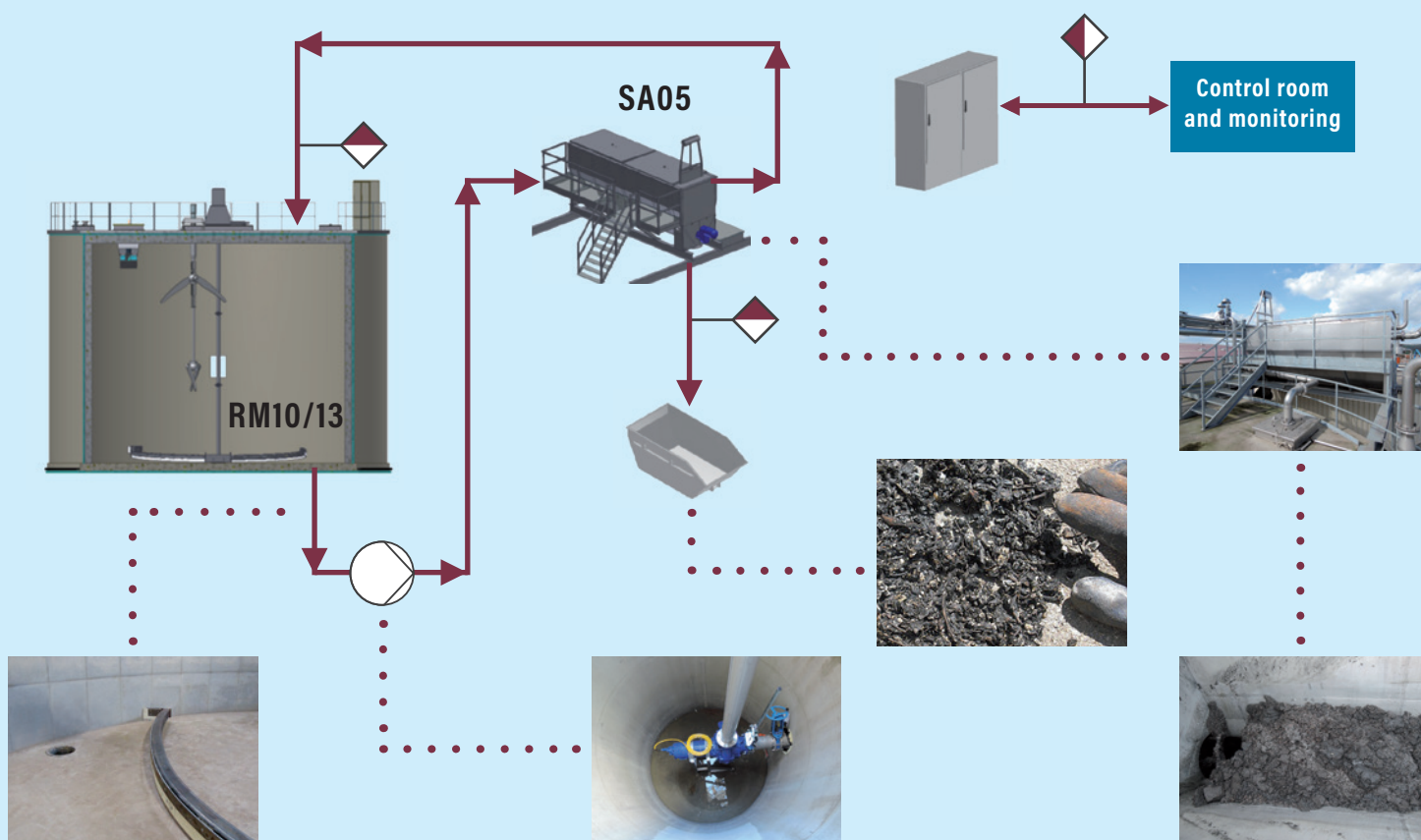
Grit pump



Sediment separator



PROCESS DIAGRAM OF THE SEDIMENT REMOVAL SYSTEM



RM10/13 FINSTERWALDER floor scraper - with the patented geometry of the cleaning arms the sinking contaminants are removed via a discharge outlet in the digester bottom. From there the grit pump transfers the sinking contaminants to the sediment separator.

SA05 FINSTERWALDER sediment separator - the grit or heavy fraction in the discharged slurry sinks and the sediment-free supernatant flows over a weir back to the digester. A discharge screw conveys the gritty material to a discharge outlet.



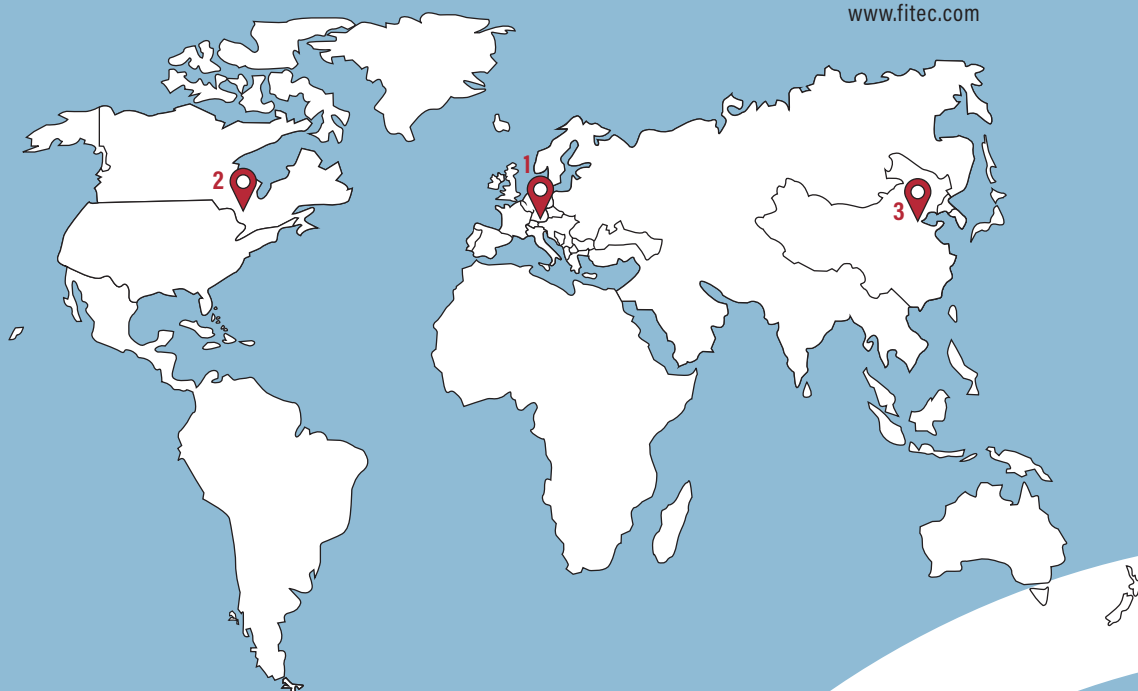
» For further Information SCAN TO
www.fitec.com/biogas-technology/rm10-rm13-floor-scraper

**FINSTERWALDER Umwelttechnik
GmbH & Co. KG**

Mailing Weg 5
83233 Bernau, GERMANY

Phone: +49 (0) 8051 96 59 10-0
Telefax: +49 (0) 8051 96 59 10-20

info@fitec.com
www.fitec.com



..... **2** North American Contact:
Fitec Environmental Technologies Inc.

Mr. Tom Ferencevic
+1 (0)289 668 0201
tom@fitec.ca
www.fitec.ca



..... **3** China Contact:
Fitec (Tianjin) Environmental Technology Co., Ltd.

Mr. Shanjie Wang
+86 22-83575668
info@fitec.cn
www.fitec.cn