FINSTERWALDER
UMWELTTECHNIK

EXTREMLY RELIABLE

The robust and reliable way to
pasteurize organic waste

PASTEURIZATION SYSTEM

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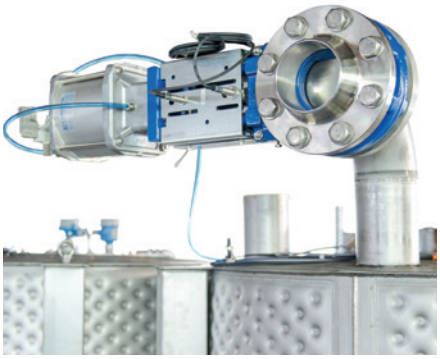


FINSTERWALDER PASTEURIZATION SYSTEM

A PASTEURIZATION SYSTEM FOR VISCOUS AND HIGHLY ABRASIVE ORGANIC WASTE.

The higher the total solids content of the processed organic waste, the more revenue is generated per ton of organic waste processed through your plant. Increasing the total solids content of the waste processed from 10% to 20% reduces by 50% the amount of digestate produced.

THEREFORE 2 CRITICAL PROBLEMS NEEDED TO BE SOLVED:
PROBLEM #1: PUMPING TECHNOLOGY

» Organic waste slurries with a high total solids content are too viscous for centrifugal pumps.
» Organic waste slurries contain significant amounts of sand, broken glass or similar highly abrasive components.
» Rotary displacement type pumps suffer significantly due to abrasion.

» SOLUTION #1: FINSTERWALDER KV20 Ball Valve Pump

PROBLEM #2: HEATING

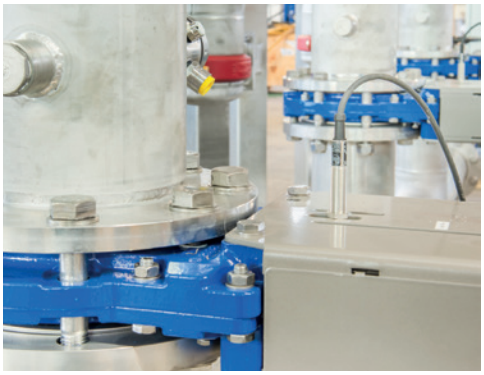
» The heating of preprocessed slurries in a stirred tank requires permanent mixing to achieve heat transfer. Regular maintenance of mixers and accumulation of impurities cause operational failures and increases loading and heating cycles.

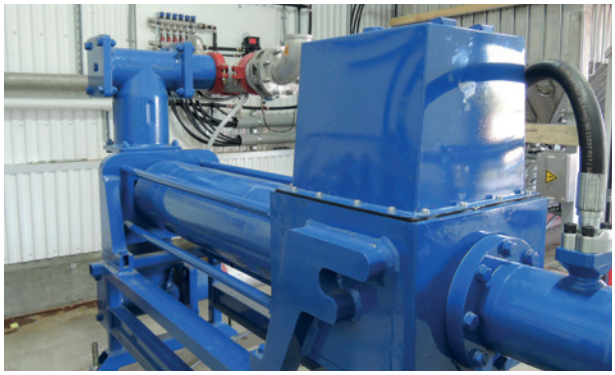
» SOLUTION #2: FINSTERWALDER Double-Tube Heat Exchanger

Each pasteurization system is sized individually and modular by design, with current reference sizes ranging from 30 to 100 tons/day. The FINSTERWALDER pasteurization system closes the gap between waste handling, pretreatment and the anaerobic digesters.

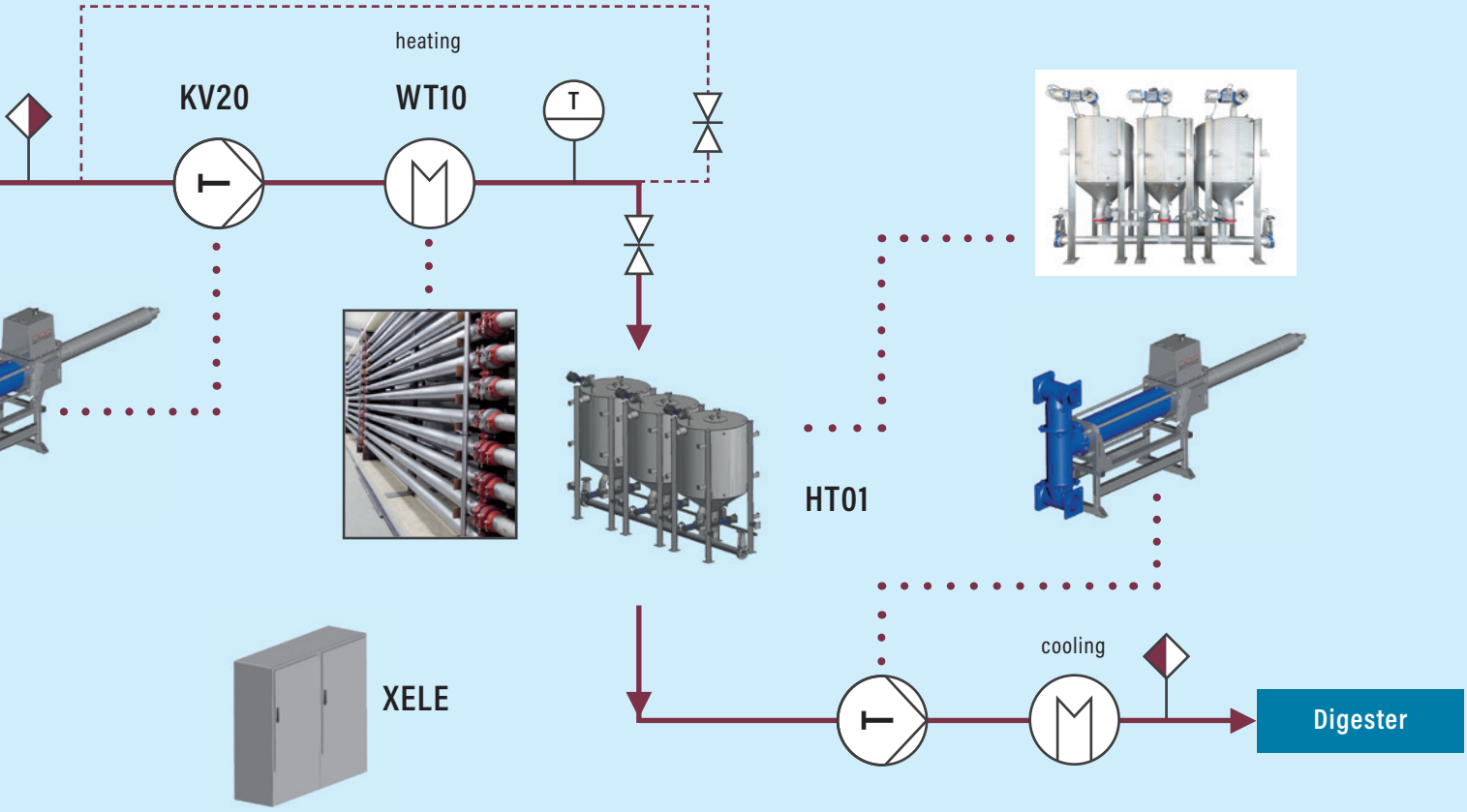
Substrate storage tank after pretreatment

» For further Information SCAN TO
www.fitec.com/biogas-technology/wt10-wt30-heat-exchanger





PROCESS DIAGRAM OF THE PASTEURIZATION SYSTEM



KV20: FINSTERWALDER KV20 ball valve pump for feeding of the heat exchanger WT1 and holding tanks. Pump especially for high pressures (up to 40 bar), abrasive and hot slurries.

WT10: FINSTERWALDER double-tube heat exchangers achieve rapid heat transfer and do not accumulate contaminants.

T: Temperature sensors: Monitoring the output temperature of the FINSTERWALDER double-tube heat exchanger.

HT01: Holding tanks for meeting regulatory requirements 1 h > 70° C.

XELE: Control system for smooth operation and user efficiency, including visualization with data interface to the control room.

FINSTERWALDER UMWELTTECHNIK

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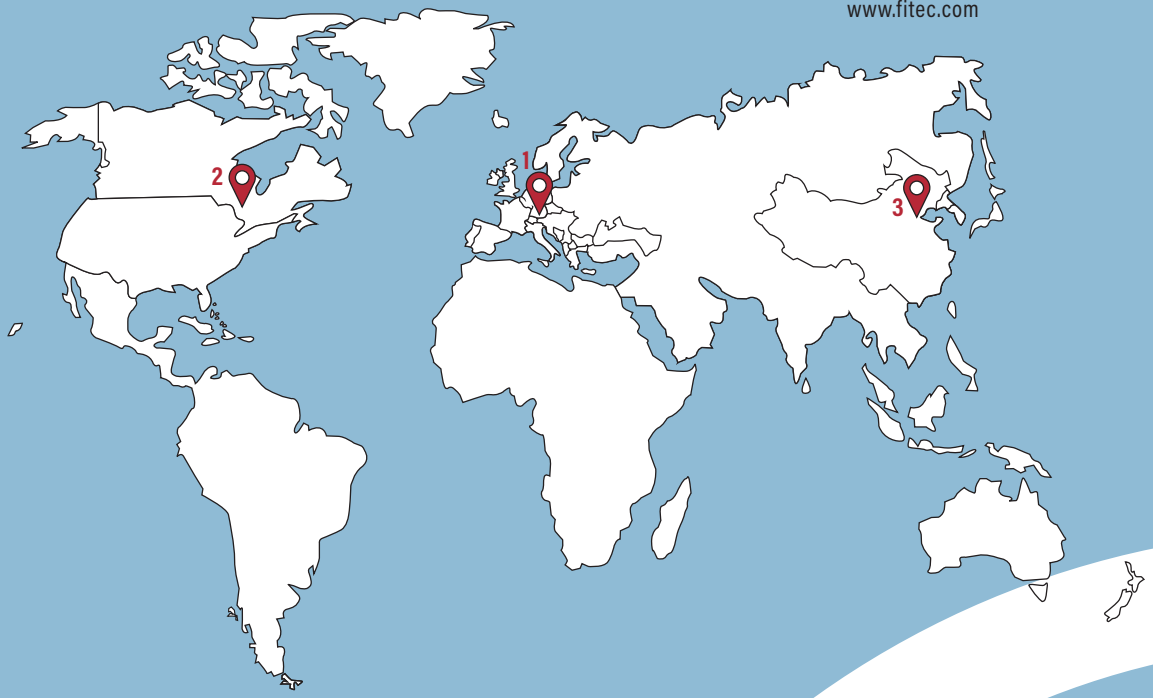

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