



PROTECTING MAN AND ENVIRONMENT, SOCIAL AND ECONOMICS CONCERNS Technology Offer

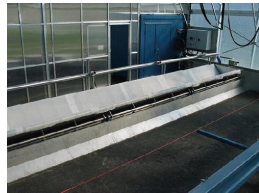
Simple technology to dehydrate sewage sludge by gravitation and drying with direct solar energy (08 AT 0105 01RX) 

Abstract

A small Austrian company has developed a device for dehydrating and drying liquid sludge. This new method allows the dehydration of sewage sludge at a waste water treatment plant with low operating cost and in a simple way. The company is looking for partners who are interested in distributing our product or want to buy the licence of the development.

Description

A small Austrian is a specialist in the field of solar drying of sewage sludge.



The reason for drying sludge is the high cost of the final treatment.

Any ton of water extracted from the sludge lowers the annual cost for the waste water treatment plant (WWTP).

On small WWTP the filtered water from a conventional dehydrating system causes often problems. For these WWTP the company has developed a system which dehydrates the liquid sludge on a regular basis.

In a first step the sludge is separated from water by gravitation like a filtration process. In this first step the solid content is increased from 3 % to 15 %. This first step lasts about 20 to 24 hours.

After that the sludge is overturned along the whole breadth (10 m) of the drying hall.

In the second step the sewage sludge is distributed in the longitudinal direction from a "Transport and Turning Machine" (see picture), the second main part of the plant. In this step the sewage sludge is dried up with solar energy up to >75% dried matter.

Innovations and advantages of the offer

- The sewage plant works independent because of batch wise supplying with sewage sludge to be dehydrated
- low operating costs
- no exceeding of limit values from the WWTP

- because of the constant dehydration
- low power consumption because of drying through solar energy
- a very simple technology - the sewage sludge is reduced about 97 % (e.g. from 1000 t liquid sludge to 30 t dried matter)
- the degree of drying can be adjusted by the user between 12 and 90 % dried matter
- no emergency generating set or high electric power consumption for dehydrating
- the WWTP works independent because it is not directly connected with the drying part
- low costs for staff and operating costs
- no intermittent load because of the constant dehydration working

Current and Potential Domain of Application

This application is mainly constructed for waste water treatment plants.



For further information (including IPR status) please contact:

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