

Title (en)
REDUCED-HEADSPACE DIGESTER

Title (de)
FAULBEHÄLTER MIT REDUZIERTEM KOPFRAUM

Title (fr)
DIGESTEUR A VOLUME DE CIEL GAZEUX REDUIT

Publication
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Application
EP 22710110 A 20220307

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Abstract (en)
[origin: CA3210647A1] The invention concerns a digester for performing a sludge methanization treatment for the purpose of generating biogas and a digestate, the digester comprising a device (32) for discharging foaming and/or floating matter (16) from the digestate (12), comprising: - a first tank (33) delimited by a first wall (100) having a first height (h1), the first tank (33) being intended to be fed with digestate (12) and with foaming and/or floating matter (16) from a volume of material (14) by overflow over the first wall (100); - a second tank (34) connected to the atmosphere and sited outside the enclosure (13) of the digester, comprising: o a first zone (35) delimited by a second wall (103) having a second height (h2); and o a second zone (36) in communication with the reservoir (19); - a conduit (37) connecting the first tank (33) via a first orifice (101) to the first zone (35) of the second tank (34) via a second orifice (102) positioned higher than or level with the first orifice (101), - the first zone (35) being intended to be fed with digestate (12) and with foaming and/or floating matter (16) from the first tank (33) through the conduit (37); the second zone (36) being intended to be fed with digestate from the first zone (35) by overflow over the second wall (103); the first height (h1) and the second height (h2) being predefined such that a first mixture, containing variable proportions of digestate and foaming and/or floating matter in the first tank (33) and having a first average density (d1), is transferred by gravity into the first zone (35), which contains a second mixture containing variable proportions of digestate and foaming and/or floating matter and having a second density (d2), the transfer operating such that the product of the first average density (d1) times the first height (h1) is greater than the product of the second average density (d2) times the second height (h2) times the first height (h1).

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