



PYROSLUDGE®

SLUDGE DRYING & PYROLYSIS

Complete solution for sewage sludge valorization into syngas and biochar

Patented technologies

Think sustainable.



PYROSLUDGE® General Concept

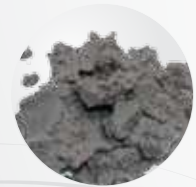


Patented technologies

PROCESS DESCRIPTION

Wet sludge (15-20% DM) from mechanical dehydration system (centrifuge or filter press) is introduced into the steam heated twin screw Kenki dryer (1) powered by technological steam (2). The drying process allows to dehydrate the sludge from 80 to 10%. Dried sewage (3) is presented to the Biogreen pyrolyser that transforms the sewage in temperatures 750-850 degree C. Obtained synas (4) is used for fueling the boiler that generates the steam for sludge drying. The exhaust air (5) can be treated and dezodorized with biofilter or activated carbon. Biochar (6) is quickly cooled down in the special solid product cooler.

The sewage sludge is reduced to ca. 5% of its weight, free of patogenes, contaminations and odors. The product of process is biochar that can be valorized as solid fuel or fertilizer according to its composition.



1



Kenki dryer

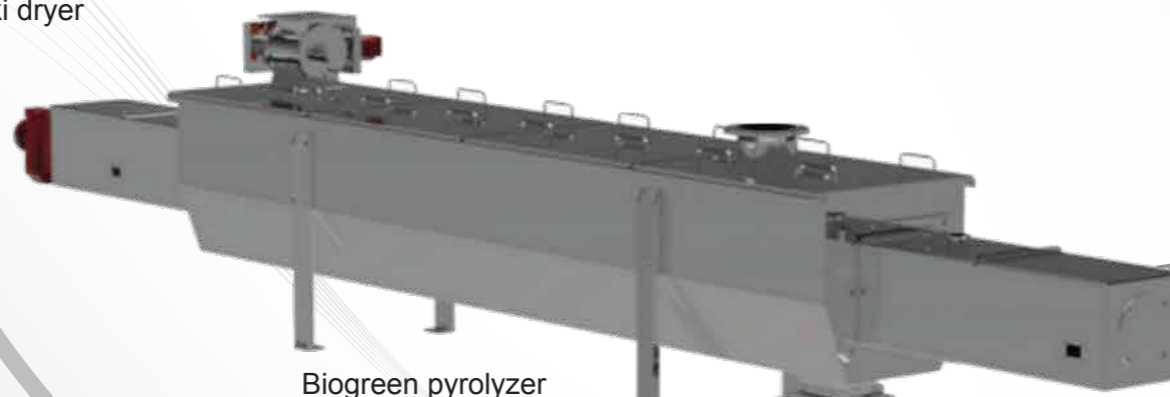


2



steam generator

3



Biogreen pyrolyzer

4



Char cooler

6



Biochar from sewage sludge
Sterilized, odorless soil enhancer or solid fuel

SYSTEM BENEFITS

93% weight reduction, 100% energy valorization

- complete turn-key system up to 1000 kg/h of wet sludge (80% moisture content)
- syngas production covers 100% of energy required for drying the sludge
- low temperature dryer guarantees no VOC out of the process
- pyrolysis guarantees complete sterilization of the sludge
- biochar, sterilized and odorless can be valorized as solid fuel or fertilizer (high phosphorus content)

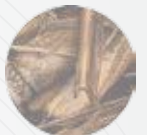


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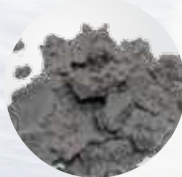
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300 000 PE PyroSLUDGE plant in USA



Inside the full containerized plant for 10 000 PE

