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EMUcontrol[®]

Organic Splitting – automatically and continuously

organic splitting as an inline process

The EMUcontrol® technology automates the organic splitting of spent coolinglubricantsandoilywastewater.



The core of the EMUcontrol[®] is a sensor system for online monitoring of the splitting result and the EMUcontrol[®] algorithm developed by *New Environmental Technology GmbH*. The algorithm evaluates the splitting result and regulates the dosing quantity of the splitting quantity. **In this way the optimum splitting result is always achieved with the lowest possible consumption of splitting agent**. Fluctuating differences in wastewater quality are recognized by the EMUcontrol[®] measuring unit and the quantity of splitting agent is adjusted accordingly.

general information

integration into existing systems or configuration as stand-alone system

The EMUcontrol[®] technology can be integrated into existing systems and processes as well as configured as a completely stand-alone system.

Would you like to improve your splitting results, automate or increase the capacity of your system?

integration of EMUcontrol® into existing systems

With an integration of the EMUcontrol[®] technology, existing batch cleavage systems or manually controlled dosing units can be equipped and thus the organic splitting can be automated. For this the EMUcontrol[®] measuring unit is placed in a bypass of the existing system. The EMUcontrol[®] measuring unit monitors the splitting result in the bypass and controls the dosing pump of the splitting agent for the whole sewage stream so that the optimal splitting result is achieved.

If a system has already a PLC, the control unit of the EMUcontrol[®] communicates with it and passes in



information to it. For example the determined dosage quantity for the dosing pump of the splitting agent.

technical date integration

- electricity requirement:
- power connection:
- processing capacity:
- signal input:
- signal output:
- side of pipe connection:
- size of pipe connection:
- mounting of control cabinet:
- < 1,0 kW 230 V from 2,0 m³/h permission to measure dosing quantity of splitting agent in I/m³ left or right selectable flange DN32 left, right or back selectable

selectable options integration

- reaction line / tube flocculator
- pH control
- flushing system for measuring unit





stand-alone system

Don't you have any wastewater treatment system yet or would you like to purchase a completely new system?

Then a complete system can be configured and built around the EMUcontrol[®] measuring unit. *New Environmental Technology GmbH* plans and builds an



EMUcontrol[®] system individually tailored to the customer in close cooperation with them. This plant will contain all the system units which will be necessary for the splitting organic process, e.g. feed pumps, dosing pumps, reaction line, flow measurements and much more. The customer receives a unique EMUcontrol® system, which has been specially adapted to him.

Technical data stand-alone system

selectable options stand-alone system

- electricity requirement:
 - processing capacity:
- weight:
- minimum size:
- 1,5 to 5,5 kW
- from 0,5 m³/h
- from 700 kg
- 1.200 x 1.000 x 1.600 mm (b x t x h)
- dilution station for splitting agent
- pH control
- separation tank for separating oil flotate from the water phase



process combinations

process combinations

The EMUcontrol® technology can be combined with other methods of wastewater treatment. It can be placed in front of ultrafiltration and evaporator units to increase their capacity. Most of the load of oil is separated from the wastewater by the EMUcontrol® before it is fed to the further treatment stage. As a result, the following treatment stage has less dirt to handle, which is noticeable, for example, in the reduction of flushing intervals. Because the organic splitting is automated by the EMUcontrol® technology, it can be placed inline before the existing treatment stage treatment stages be controlled and both can as one unit. No intermediate buffers or similar are required due to the inline organic splitting.



zero discharge

The different treatment methods can be combined until the state of **zero discharge** is achieved. In combination with the NET RO unit at the end of a process the level of contamination of the water has been purified to such an extent that it can be reused in all processes, similar as fresh water.



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