

From advice to trial operation – ENVICON offers all-round service

Many wastewater treatment plants still have a great deal of potential. The use of the most modern and intelligent technology can considerably improve results and protect the environment, as well as save money, without having to dispense with the customary safety elements. Let us perform a non-binding assessment of your potential, free-of-charge and give you a positive surprise. You can download a questionnaire under www.envicon.net with which we can get an initial picture of your treatment plant.



We hope we have caught your interest. You can contact us at any time by phone and email. We will be pleased to visit you without obligation and show you the improvements we have already achieved at over 100 wastewater treatment plants. If desired, we will also demonstrate the capabilities of the TAT-IntelliClean® at your treatment plant in a free trial operation.



Expertise and experience in the aeration of wastewaters.

ENVICON is your specialist in the use of aeration elements and in the optimisation of aeration in the field of wastewater technology. Based on state-of-the-art process engineering and our experience in plant construction and component production, we offer you sophisticated solutions for your wastewater treatment.



TAT-IntelliClean® – the innovative control system.

Permanently saves budgetary funds and protects the environment.



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ENVICON – more than 20 years' experience in biological wastewater treatment.

www.envicon.net

Excellent cleaning capacities combined with the economical use of energy

The search for optimisation potentials at wastewater treatment plants is becoming increasingly intensive: The requirements are becoming more stringent and, at the same time, money is often becoming tighter. Based on more than 20 years' experience in biological wastewater treatment, ENVICON has developed an ultramodern and patented control system that assists you in the optimisation of your treatment plant.



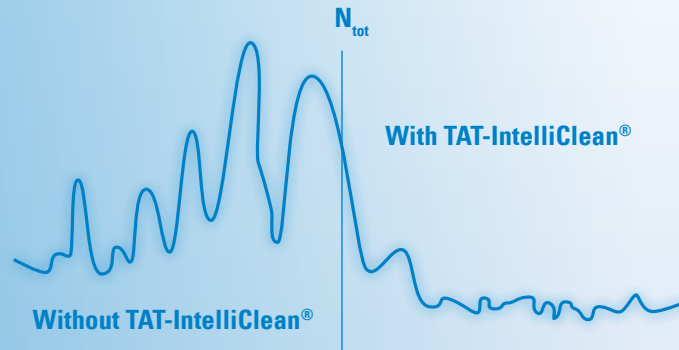
An important factor for the success of a control system is the precision of the switching point recognition. The innovative TAT-IntelliClean® system, based on fuzzy pattern technology (comparable with the methods used in safety technology to identify persons), identifies the specific patterns from the complex biological processes of each wastewater treatment plant, that precisely depict the process steps taking place (nitrification/denitrification/biological P-elimination) and their phase ends.

The switching points in the patterns are recognised irrespective of absolute values and sensor drift. Based on this evaluation, the



aeration is permanently and optimally controlled as a function of the load. In this way, excellent treatment capacities are achieved with an economical use of energy and a high uniformity of the effluent values at a low level.

The TAT-IntelliClean® controls and analyses the patterns 24 hours a day, 365 days a year, keeps the degree of process efficiency of the plant at a constant high level and, in this way, provides operating companies with safety and comfort, protects the environment and permanently saves budgetary funds.

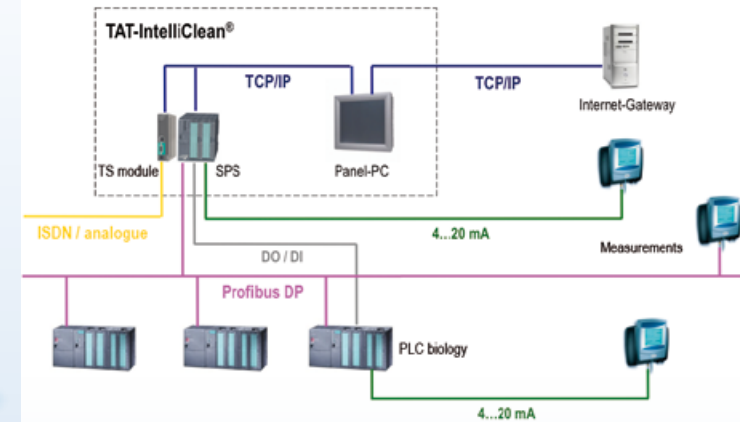


It is often possible to finance the TAT-IntelliClean® (and the new acquisitions connected with this within the framework of optimisation) via the reimbursement of the waste water levy. Alternatively, the amortisation periods are usually short. All types of financing can be offered if required. We will be pleased to inform you in this regard.

The TAT-IntelliClean® is suitable for existing and new plants, from small plants to orders of magnitude of several hundred thousand PE. The efficiency can be increased at low cost and without structural alterations by the dynamic use of the existing nitrification and denitrification volumes. This applies both with respect to underloaded plants and those that have already reached their design limit.

Simple integration of the controller in your existing system

For the TAT-IntelliClean®, rugged and modern hardware in accordance with the example below is used. It can be adapted to any existing system. Existing sensors at the wastewater treatment plant, including ammonium nitrate sensors, can be integrated irrespective of the manufacturer. If desired, wireless data transmission is possible. The combination of panel PC and PLC means visualisation where you want it to be, combined with stable performance in the background.



The features of the TAT-IntelliClean® ensure that you have optimum operational safety:

- **Malfunction concepts in case of absence of measured values**
- **Elimination of implausible measured values (fault tolerance)**
- **Emergency programs (e.g., on the PLC) in case of failure of the PC**
- **Automatic emergency calls via different channels**

According to the customer's choice, further features of the TAT-IntelliClean® can be activated and, thus, additional important processes also controlled as a function of the load and in a process optimising manner:

- Flocculating agent dosage
- Recirculation
- Internal / external carbon addition
- Process water dosage
- Sludge recirculation
- Surplus sludge removal