

## The Pillaerator

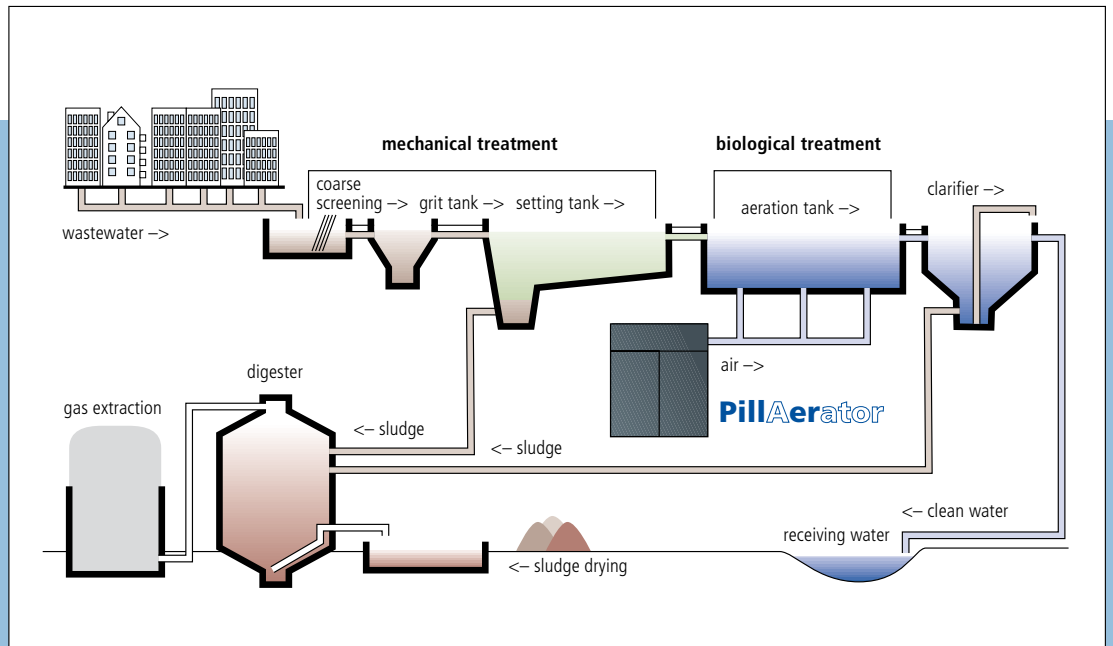
*High tech for an intelligent wastewater treatment*





# ***Pill*****Aerator**

His sheer name indicates power: the powerful energy bundle developed on the basis of intelligent and future-proof technologies puts pressure on the wastewater!



## The PillAerator: For clean water all over the world.

*Water is one of the most precious treasures of this planet. And clean water is the most important resource making life possible on earth. However, the explosive increase of the world population, the enormous development of mega-cities as well as the rapid progression of industrialisation in countries like China and India augment the worldwide need for clean water. In Germany alone, more than 10,000 sewage plants clean more than 10 billion m<sup>3</sup> of wastewater each year.*

The wastewater treatment is quite a complex process. The German channel net of more than 515,000 km (it could circle the world 13 times) pipes the wastewater to multi-stage sewage plants which operate as follows.

### **Mechanical Treatment:**

At first, racks remove raw contaminants. Afterwards, smaller contaminants like sand and fluids are removed in the grit channel.

### **Biological Treatment:**

The residual organic contaminants are treated with micro organisms. These microbes convert the contaminants into inorganic biomass. For the best performance, the microbes need a constant supply of contaminants and air.

And now the PillAerator comes into operation as you can see in the drawing. It cares for an ideal aeration and in doing so drives on the treatment procedure.

As the last step, the sewage sludge is withdrawn and the water is released to the water cycle.

## State-of-the-Art Wastewater Treatment.



### **It keeps going and going and going.**

Thanks to a mechanism which is virtually maintenance-free and wear-free the PillAerator is an ultra-strong keep-on-runner. In cases of power interruptions, the mechanics will be safely captured. The standard rotation speed control determines his speed.

### **Friendly to the environment and the purse: that's clean.**

The PillAerator supplies the microbes with air which is 100 % oil and grease free so that the treated water won't be contaminated again. Thanks to a magnetic bearing, the motor does not need oil or grease for a smooth performance.



**A clearly smart system.**

The PillAerator is equipped with a HMI (Human-Machine-Interface) which allows a quick identification and a clear setting of all required machine parameters.

**We support self-help groups.**

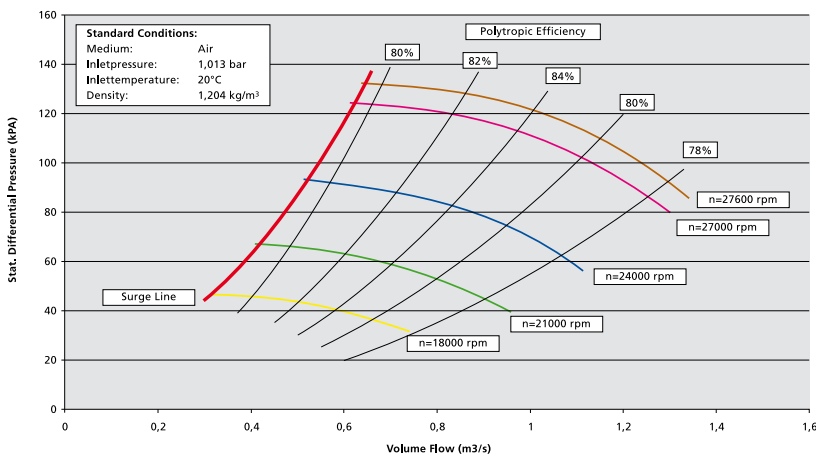
Only the air intake filter and the coolant need some service. This can be executed by the customer if he chooses to do so. It saves money and it is all that needs to be done.

**The PillAerator stands up for saving energy.**

Considering the PillAerators efficiency you can see his value. Compared to conventional rotary piston blowers, the PillAerator has an efficiency of up to 84 % which can save up to 150,000 kWh per annum.



**Performance Curve 5069 MTC 50125**





# *pure piller*

## Piller, Trust and Partnership.

They say it's better to act than to neglect. This means also that companies should always be aware of their special responsibility.

We at Piller feel constrained to both statements. Every day, our 250 employees work hard for a high quality and a constant development of our products. No matter where Piller fans are deployed, the focus is always on the customer's benefit.

We take pride in our PillAerator being an ecological and economic contribution to wastewater treatment. Because clean water is a precious good, especially in developing and emerging countries. Let us continue to work together for an even more liveable world.

Your wishes and challenges are always welcome.

Sincerely,  
Nils Englund (Managing Director)



The Center of Motion.

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France	Germany	Hungary	India
Israel	Italy	Japan	Korea
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**Piller Industrieventilatoren GmbH**

Nienhagener Straße 6  
DE-37186 Moringen

Phone: +49 (0) 55 54 - 201-0

Fax: +49 (0) 55 54 - 201-271

[info@piller.de](mailto:info@piller.de)

[www.piller.de](http://www.piller.de)