

## High-Efficiency Aeration for Wastewater treatment plants



**HIGH EFFICIENCY**  
Large Usable Surface



**EASY CLEANING**  
Simple Handling



**RESISTANT**  
pH-neutral



**LOW ABRASION OF  
ADHERENT BACTERIA**  
Due to the stream

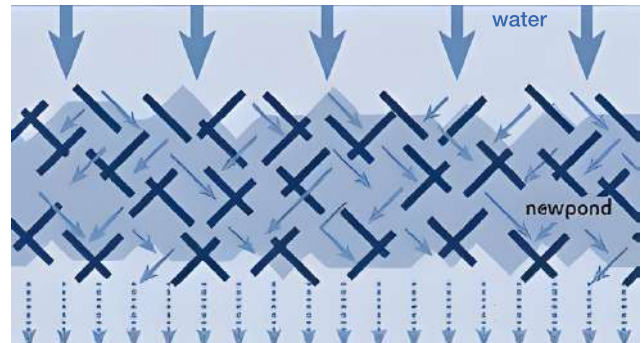
  
**MADE IN ITALY**  
Since 1983

## FUNCTION

In wastewater treatment microorganisms are of particular importance because they are able to degrade pollutants. In conventional aeration tanks these organisms appear in small flocs dispersed in the water. This is called activated sludge.

By the proportion of the activated sludge in the aeration basin, the degradation rate can be controlled. But the amount of the activated sludge in the tank cannot be increased arbitrarily. At a certain amount of suspended biomass the wastewater will become too viscous/muddy for an effective treatment. In this case the tank volume has to be increased by civil works to keep the higher amount

of activated sludge in suspension. As an alternative to complex and cost-intensive civil works respectively new buildings, it is possible to increase artificially the biomass in the tank by the application of biofilm carriers. Depending on the tank size, its form and internals the amount of activated sludge can be doubled. Newpond is a biofilm carrier with a very high specific surface. It meets all demands on a modern high-efficiently biofilm carrier. Microorganisms grow best in so-called biofilms. These slimy films adhere everywhere where the microorganisms find a surface they can attach to. On the carrier a biofilm develops which is made up of several layers. The living conditions within these layers are partly quite different. By this means a plenty of pollutants can be degraded.



## NEWPOND® IS APPLICABLE FOR ALL COMMON PROCESSES USING BIOFILM TECHNOLOGY

- for rotating drum systems
- for fluidized bed reactor systems
- for sewage treatment plants
- for fixed-bed reactor systems like trickling filter
- for the expansion of existing treatment plants



## BACTERIA CARRIER MATERIAL

### Product properties

- large usable surface
- high efficiency
- low abrasion of adherent bacteria due to the stream
- easy cleaning and simple handling
- resistant and pH-neutral
- high chemical resistance



### TECHNICAL DATA

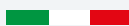
Material	special HDPE	
Diameter	20 or 50 mm	0,79 or 2,17 in
Specific surface	500 m <sup>2</sup> /m <sup>3</sup>	152 ft <sup>2</sup> /ft <sup>3</sup>
Bulk density	200 g/l	12,5 lb/ft <sup>3</sup>
Material density	0.95 kg/l	59,3 lb/ft <sup>3</sup>
Max. Temperature	80 °C	176 °F

All data are approximate!

- suitable for aerobic and anaerobic processes
- COD - reduction
- BOD - reduction
- nitrification
- recirculation by stream



Since 1983 your partner for wastewater treatment products.  
Proudly Made in Italy.



Our continuing commitment to quality product, may mean a change without notice of specification, design and other content included in this brochure.

## CONTACT

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Italia

Azienda con sistema  
di gestione qualità  
certificato secondo la  
Norma ISO9001:2015

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