



## RK BioElements

RK BioElements - an efficient bio-media in absolute high-end quality for biological water purification - e.g. Aquaculture and Wastewater.

With the extensive international use, RK BioElements help to improve environments and ensure freshwater resources worldwide.

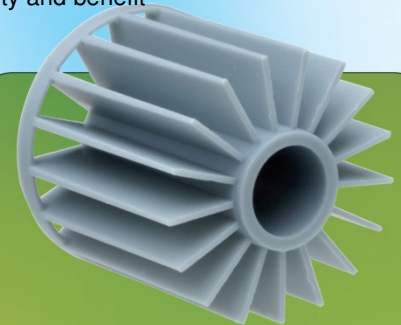
RK BioElements provide a reliable purification process with an optimum water quality as a result. Experience from our customers is that solutions with RK BioElements contribute to increased productivity and benefit

RK BioElements offer many exciting possibilities and can be used in all types of biological water treatment plants in connection with both nitrification to denitrification.

RK BioElements are particularly suitable for biological water purification within aquaculture and traditional wastewater. Moreover, RK BioElements can be used with great advantage to ochre filtration in e.g. water works and in recirculation systems for water reuse in countries where freshwater is a limited resource.

The patented asymmetrical design distinguishes itself by ensuring an optimum flow through the filter. Since RK BioElements combine a good flow with a large surface area of 750 m<sup>2</sup> / m<sup>3</sup>, the filters work with very high turnover rates. This makes it possible to achieve environmental gains in the form of a reduced energy and water consumption.

The properties and possibilities of RK BioElements are continuously developed and tested – among others in connection with national and international research projects. In order to constantly meet environmental requirements and legislation regarding biological water treatment, RK BioElements are today available in the 4th tested generation.



### Unique design

*RK BioElements patented Asymmetrical design ensure*

- optimum flow through the filter
- larger surface area 750 m<sup>2</sup> / m<sup>3</sup>
- high conversion rate in the filter
- very easy to clean the filter
- dimensionally stable elements
- elements with long life
- optimum water quality
- high reliability

Patented Design

# Specifications:

## A multitude of possibilities:



### RK BioElements Light

have a density of 0.93 g/cm<sup>3</sup> and are used in "up-flow" and "moving bed" filters.

### RK BioElements Medium

have a density of 1.00 g/cm<sup>3</sup> and are used primarily in "moving bed" filters, where this density results in considerable energy savings.

### RK BioElements Heavy

have a density of 1.20 g/cm<sup>3</sup> and are used primarily in bottom filters - "down-flow fixed-bed" filters.

BioElements	Light	Medium	Heavy
Volume weight (kg/m <sup>3</sup> )	158	172	210
Number (pcs/m <sup>3</sup> )	255.000	255.000	255.000
Specific surface area (m <sup>2</sup> /m <sup>3</sup> )	750	750	750
Density (g/cm <sup>3</sup> )	0,93	1,0	1,20

RK BioElements are produced in Polypropylene (PP), which contains no halogens, and can be recycled or disposed of by incineration, where the end product is exclusively water and carbon dioxide.

The filling material used in RK BioElements Medium and Heavy is Barium Sulphate. (BaSO<sub>4</sub>). Barium Sulphate is environmentally neutral, ref. safety data sheet: "No danger of toxicity, the material is biological inactive".

RK BioElements are delivered in Big Bags of 3 m<sup>3</sup> specially designed to optimize freight costs and minimize waste during packaging and transportation.

## About RK Plast

RK Plast with head office and production in Skive, Denmark, is a modern and international injection molding company, based on years of experience in the development and production of technical plastic components of high quality.

Thanks to our extensive know-how, innovative product development and automated processes, our products are sold to leading customers in a large number of industries in Denmark and internationally.

To strengthen our continued positive development we continuously invest in our production and processes. Recently, we have through the acquisition of a company with significant synergies been able to further consolidate our leading position within technical injection molding.

A large part of our activities today lie within production and marketing of our patented OEM product RK BioElements used for all types of biological water purification. RK Plast is at the forefront in the field, and RK BioElements with the unique design have achieved a very strong international position within primarily aquaculture.

### Partnership

Through cooperation and innovation, RK Plast wishes to be known as a competent, flexible and dynamic business partner in solving our customers' different needs.

We attach great importance to a cooperation based on partnership, where we in close dialogue with our customers actively contribute with professional advice about the solutions.

**RK BioElements**  
- for a cleaner world