

# SuperBead Filter

The SuperBead combines fine mechanical and biological filtration. The SuperBead is used for koi swimming ponds and other ponds, swimming pools, aquaculture. The filter is characterised by its flushing process.

The SuperBead filter removes with just one passage through the filter 100% of particles larger than 50 microns and 48% of particles between 5 and 10 microns.

## Pumps and energy-saving

One of the biggest advantages of the SuperBead compared with sand filters and other bead filters is the required pump pressure. The SuperBead enables low pressure pumping (energy-efficient) operation.

## Practice

The SuperBead is easy to fit, both above and below water. Moreover, the SuperBead can easily be fitted further away from the pond, provided the pipework has suitable dimensions. As the filter is a closed system, indoor fitting of the filter does not result in any moisture, odour or insect problems. Outdoor fitting is no problem as the SuperBead has no electrical components. Furthermore it can be used at seawater applications because all components are made of plastic.

## Bead filter flushing process

Every Bead filter is characterised by a flushing process. The captured particles need to be flushed out of the filter.

The SuperBead was designed especially for this flushing process.

For an animation of the rising process see [www.air-aqua.com](http://www.air-aqua.com).

## The SuperBead properties:

- steady flushing process: does not damage the bio-film
- energy-saving: suitable for low-pressure pumping
- simple: easy to understand and operate
- reliable: no electronic or wear-sensitive components
- little maintenance and a fast rinsing process
- easy to automate
- superior clarity: effectively removes solid particles
- stable bio-film
- suitable for sea water



### Brief description of the operating principle

- following coarse pre-filtration, the water is pumped into the filter
- the granules rise to the top where they float
- the granules trap fine particles up to 5 microns
- biological filtration takes place on the surface of the granules
- the captured contaminants are removed during flushing
- the flushing has an easy automation option

### The SuperBead's hour-glass shape ensures:

- steady water flow through the filter
- good distribution of water over the filter bed
- the flushing process

### The SuperBead:

- uses little flushing water
- has high flows at low pressure
- has a high biological capacity
- has large connections

### Automating the SuperBead

Automating the SuperBead flushing is one of the best ways to guarantee good water quality. The filter is then flushed fully-automatically, for instance every day, so that contaminants are removed automatically every day. If necessary, a dirty-water pump can be connected that activates during flushing to suck the water from the SuperBead to the drain.

*SuperBead,  
easy to automate!*



Model	Koi pond m <sup>3</sup>	Pond m <sup>3</sup>	Swimming pool/pond m <sup>3</sup>	Max. m <sup>3</sup> /hr	Dimensions ø x h (cm)
<b>SuperBead Small marble</b>	25	40	70	17,5	60x103
<b>SuperBead Large marble</b>	70	100	150	35	84x145

