



# GLASS BEADS

## THE REVOLUTIONARY FILTRATION MEDIA

Ultra Pure Glass Beads for an improved approach  
in raw water filtration and water reclaiming applications



Worldwide Experts in Water Treatment

# GLASS BEADS

Sized in 4 grades from 0.25 to 4 mm, the Glass Beads simplify and optimize water treatment processes by improving quality of filtrate and increased volume treated. This filtration solution can be retrofitted on existing plants to increase the workload capacity and reduce backwash frequency almost by half. This innovative technology has a significant impact on investment cost reduction for new and existing plants.

## STANDARD SIZES

ARTICLE	BEADS DIAMETER		BULK DENSITY (≈)		ROUNDNESS
GLASS BEADS	mm	mesh	kg/l	lb/ft³	Nominal values
GRADE 01	0.25 – 0.50	60 – 35	1.46	91	≥ 0.95
GRADE 02	0.40 – 1.00	40 – 18	1.49	93	≥ 0.95
GRADE 03	1.50 – 2.10	14 – 10	1.51	95	≥ 0.95
GRADE 04	2.80 – 4.00	7 – 5	1.53	96	≥ 0.95

\*standard US mesh number near particle size.

Roundness: simultaneous measurement of roundness through digital image processing (Retsch-Camsizer, value b/l3).

## PEAK PERFORMANCE

Filtration with Glass Beads technology offers considerable benefits starting with significant improvement in filtration:

- 90 to 95% rejection down to 1µm particles
- 42% higher interstitial space volume for maximum dirt holding capacity

Comparison of raw water filtered volumes between each backwash with multimedia filters vs. Glass Beads filtration:

- on average a 25% capacity gain in treated process water is realized

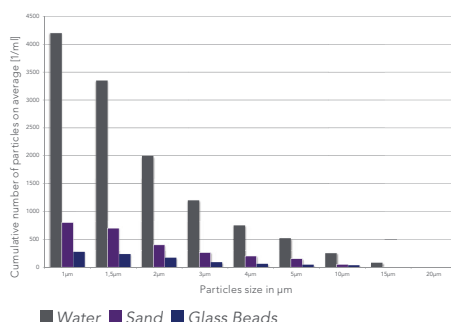
### AVERAGE FLOW:

MMF: 44,9 m³/h; GBF: 55,75 m³/h

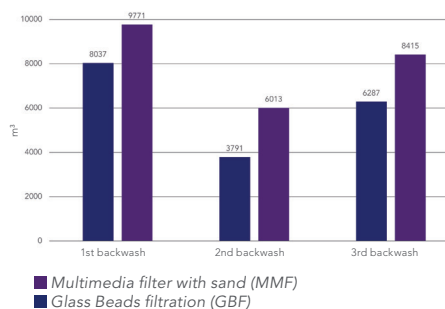
### FLOW/PRESSURE DROP RATIO:

MMF: 103 m³/h/bar; GBF: 126 m³/h/bar

## SEPARATION PERFORMANCE



## BACKWASH PERFORMANCE



Ovivo Switzerland AG  
Benkenstrasse 262, 4108 Witterswil, Switzerland

Ovivo is a global leader in water solutions for the semiconductor industry and the only water company which had been a member of the former F450C consortium.

ovivowater.com

©2021 Ovivo. All Rights Reserved. All data are reference values – subject to change without prior notice.

## KEY FEATURES



### SMALLER FOOTPRINT

30-40% less footprint



### BACKWASH WATER

20-30% less backwash water



### ENERGY EFFICIENT

Fewer and shorter backwashes, less downtime, reduced pressure drop



### FILTRATION TIME

40-50% increase of filtration time between cycles



### DUST-FREE INSTALLATION

Delivered in a pure and clean condition, no special preparation needed



### NO CONTAMINATION

Smooth surface (no porosity), very low risk of biofouling



### LIFETIME

10 times higher crushing strength than gravel



### PERFORMANCE VALUE

Substantial investment, running cost reduction



### ENVIRONMENT

Conditioning or recycling possible

GlassBeadsBRO-08.2021