

in raw water filtration and water reclaiming applications





Glass beads

Sized in 4 grades from 0.25 to 4 mm, 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

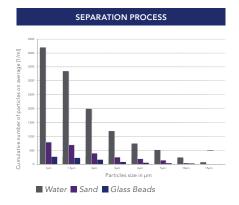
^{*}Standard US mesh number near particle size.

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



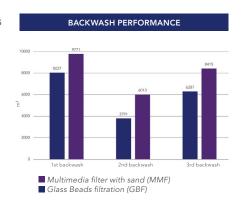
Comparison of raw water filtered volumes between each backwash with multimedia filters vs. Glass Beads filtration:

• 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



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Ovivo is a global leader in water solutions for the semiconductor industry and stands as a founding member of the Semiconductor Climate Consortium (SCC), a pioneering initiative dedicated to fostering climate progress within the industry.

KEY FEATURES



SMALLER FOOTPRINT 30-40% less footprint



20-30% less backwash water



ENERGY EFFICIENT

Fewer and shorter backwashes, less downtime, reduced pressure drop



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



10 times higher crushing strength than gravel



PERFORMANCE VALUE

Substantial investment running cost reduction



Conditioning or recycling possible