Benefits, case studies and specifications

ZEOMEDIA

Intelligent filter media

Save thousands of dollars on

backwashes | maintenance | man hours | water | electricity | filter elements spare parts

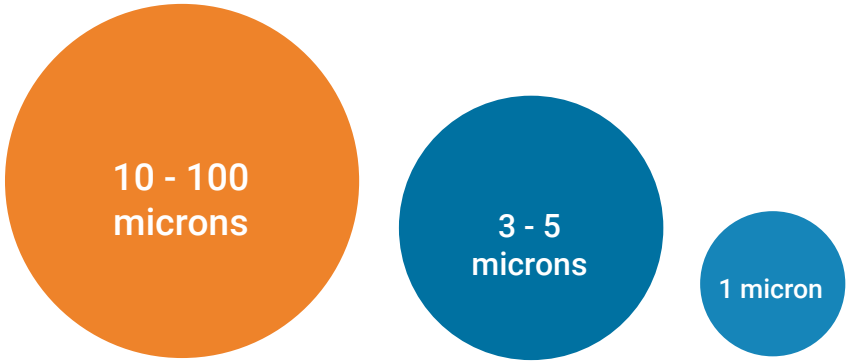
in you water treatment.

Make your water treatment plant more efficient!

Certified to NSF/ANSI 61

Greater water savings during start-up and operation.

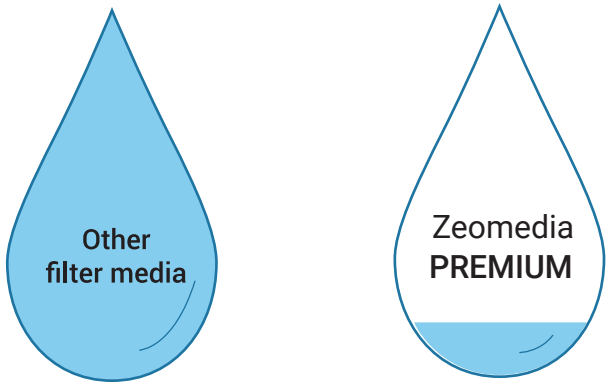
Zeomedia is made of the only high-purity, chemical pre-washed zeolite
Ensuring a superior performance and an easy and hassle-free starting



Other filtration media:
Silica sand (25-100 micron)
Multimedia (12-15 micron)

Zeomedia 12-20

Zeomedia 14-40



+ 10x more surface area.
+ Particle retention of up to 1 micron.

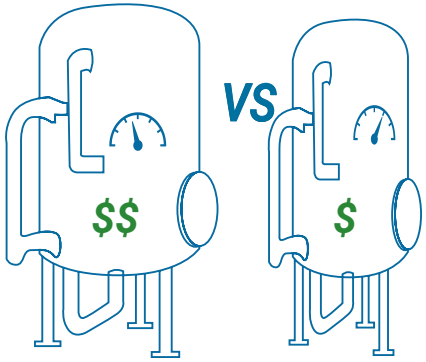
+ 80% less time and water spending per backwash.
+ Triple the operating cycle of your filters.

Multimedia: 70% silica sand 20-40, 15% antracite, 15% filter ag.

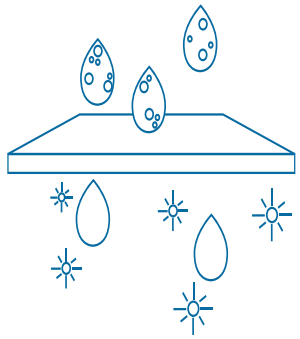
*Zeolita Mex, NS, TX

Reduce your capital and operating cost
Due to his high porosity and permeability,
Zeomedia provides twice as much flux capacity than multimedia

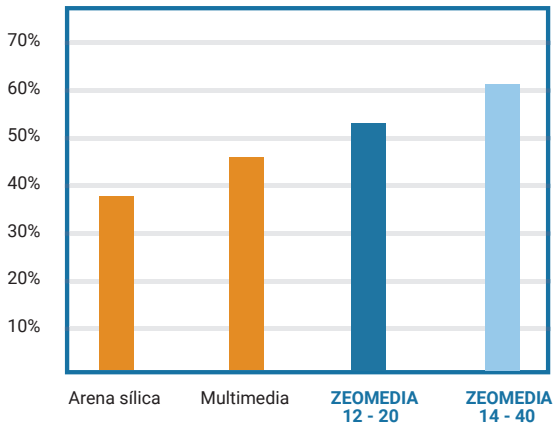
+ Does not require aerators to expand the filtration bed.
+ Double filtration speed.
+ 30% less filtration area, which translates less material.



+ 50% greater filtration stroke vs. multimedia.
+ Up to 30% less wear and fouling on the rest of the filter elements.
+ Up to 50% savings in water and energy in backwashes.

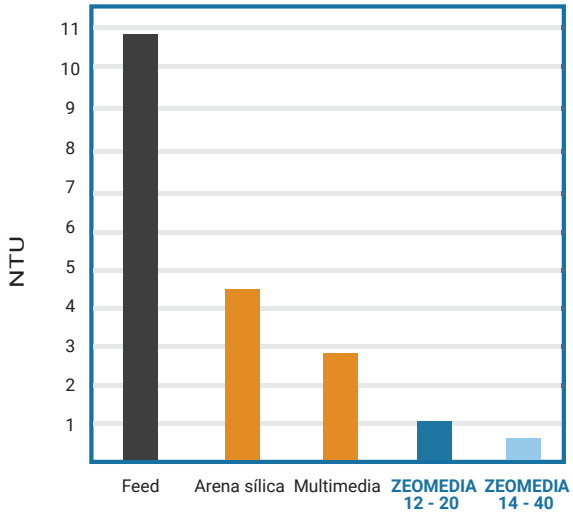


Greater elimination of solids, which translates into less wear on the rest of the filter elements.



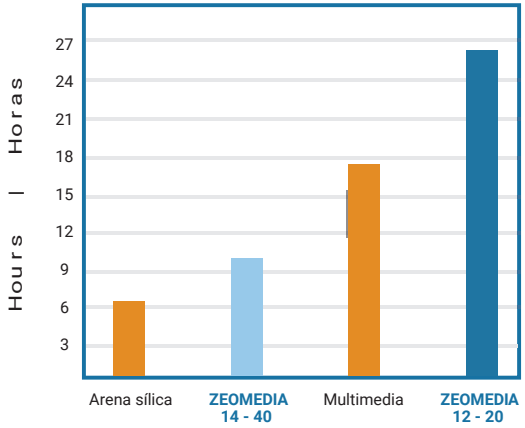
SDI removal

Reduces up to 35% SDI more than Multimedia



Turbidity removal

Reduces more than 50% Turbidiy than Multimedia



Filtration cycle

Up to 35% longer filtration cycles than multimedia filters

** Test performed with: Filtration rate = 12 gpm / ft2*
SST = 30 ppm

Save up to 50% filter space by doubling

doubling the filtration rate.

Reverse Osmosis Prefiltration in automotive mechanical plant

Comparative estimates for a feed flow of 18 m3 / hour and a tank operating with water from the municipal network as an influent.

Filter media	Zeomedia 14 x 40	Silica sand 14 x 40	Multimedia
Tank dimensions	36" x 72"	42" x 72"	36" x 72"
Total volume of filter media	20 ft²	30 ft²	20 ft²
Filtration rate	12 gmp/ft2	8 gmp/ft2	10 gmp/ft2
Average operational cycle	23.5hrs.	11.3 hrs.	22.1 hrs.
Filtered operating mass	54.12 kg/ciclo	26.02 kg/ciclo	50.90 kg/ciclo
Annual expenditure of water	**5475 m³**	**11386.0 m³**	**5821.83 m³**
Wear*	1x	1.2x	1.2x
CAPEX	1x	1.7x	1x
OPEX	1x	2.2x	1.3x

*Estimated wear of filter elements by fouling.

Reduces energy consumption due to a

50% lower pressure differential.

Reverse Osmosis Prefiltration for thermoelectric plant

Comparative estimates for a supply flow of 140 m3 / hour and three tanks operating plus one in standby with surface water.
With a NTU supply of 15 - 23 NTU.

Filter media	Zeomedia 12 x 40	Silica sand 14 x 40	Multimedia
Tank dimensions	78” x 48”	102” x 48”	78” x 48”
Total volume of filter media	400 ft²	680 ft²	400 ft²
Filtration rate	8 gmp/ft2	5 gmp/ft2	8 gmp/ft2
Average operating cycle	12.1hrs.	4.3 hrs.	11.4hrs.
Filtered operating mass	28.87kg/ciclo	9.9 kg/ciclo	22.25 kg/ciclo
Daily expenditure of water	**77.28 m³**	**403.2 m³**	**100.8m³**
Wear*	1x	1.2x	1.2x
CAPEX	1x	1.7x	1.95x
OPEX	1x	2.2x	1.3x

Taylored solutions

The only company in the industry that offers a specialized solution for every application.

Zeomedia 14-40

Ground and municipal network water filtration.

Reverse Osmosis Systems.

Recirculating water filtration (cooling towers).

Zeomedia 12-20

Surface water and pool water filtration.

The confidence of being in good and expert hands:

Filterability tests in laboratory plant or pilot plant.

Assessment with filter train design based on simulations and projections.

CAPEX and OPEX analysis.

Technical support during installation, commissioning and operation stages.

Training and education for your team and clients.

Technical specifications

Physicochemical characteristics

Parameter	Standar	Zeomedia 12-20	Zeomedia 14-40
Volumetric weight	ASTM D7263-09	690 - 730 kg/m³	
Specific weight	ASTM D854-14	1.5 - 2.2 g/cm²	
Effective mesh size range	ASTM D1921-18	8 -20	14 - 40
Uniformity coefficient		1.48	1.27
Material below the mesh		2% max.	
Acid Solubility	ANSI/AWWA B100-89	Max 5%	
Grain firmness (N)	=TVT Texturometer	79	77.4
Superficial area	BET Method	35 - 40 m²/g	
Clinoptilolite	X-ray diffraction	75 -83 %	
Clays		3% max.	

Operational parameters

	Zeomedia 12-20	Zeomedia 14-40
Flux rate	8-20 gpm/ft²	10-12 gpm/ft²
	20-50 m3*h/m²	26-32 m3*h/m²
Maximum recommended flux rate	20 gpm/ft²	
	50 m3*h/m²	
Bacwash flux	18 gpm/ft²	
	44 m3*h/m²	
Recommendend expansion	30%	
Bed high	30'-48' pg	30'-48' pg
	0,76-1,22 m	0,76-1,22 m
Maximum recommended pressure	45 psi	
Backwash differential pressure	10-15 psi	10-15 psi

Certified to NSF/ANSI 61

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ZEOMEDIA

El medio filtrante prelavado.

ZEOMEDIA is manufacturated by Zeomex, the leading company in Mexico in the mining and production of zeolite products

Would you like to find out ***more***? Let's talk!

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