



SuperTRAP[®]

High Performance Zeolite Filter Media

Advantages

CASCADIAN[®] SuperTRAP[®] filter media offers advantages over conventional sand, sand & anthracite, or multimedia filters.

Advantages over conventional media include:

- Lower pressure loss for a given flow rate
- Higher solids loading capacity
- Reduced backwashing frequency
- Enhanced filtration performance
- Reduces load on downstream equipment
- Light weight reduces shipping costs
- Single media replaces multimedia

CASCADIAN[®] SuperTRAP[®] is a high quality, granular, zeolite filter media. It is produced from a unique mineral deposit having high surface area and porosity. The surface structure of SuperTRAP[®] features microscopic mineral projections that allow particulate matter to penetrate deeply into the bed. These properties make SuperTRAP[®] an ideal filtration media achieving higher solids loading & superior filtration performance. Higher service flow rates reduce new equipment costs and provide expansion opportunities for existing equipment. Single media solution provides for easy re-bedding and reduced inventory.

SuperTRAP[®] vs. conventional media

Filter Media	Nominal Rating	Loading Capacity
Sand	20 μ	1.0 X
Sand & Anthracite	15 μ	1.4 X
Multimedia	12 μ	1.6 X
SuperTRAP[®]	5μ	2.8 X

Uses Include

- Removing oxidized metals such as iron and manganese
- Removing turbidity (suspended solids) from lake, river, pond or stored water
- Cooling towers and makeup water
- As a pre filter for;
 - Granular activated carbon filters
 - Reverse Osmosis systems
 - Softeners and other ion exchange systems
 - Ultraviolet systems
- As a post filter for;
 - Ozone systems
 - Chlorination systems
 - Flocculation / coagulation systems
- Increasing capacity of existing filter equipment
- Replacement of existing pressure or gravity filter media

Physical Properties

- Color: Light green
- Bulk Density: ± 55 lbs./ft³
- Surface Area: ± 25 m²/gr
- Specific Gravity: 2.2 gr/cm³
- Maximum Water Retention: $\pm 55\%$ Wt.
- Mesh Size: 14 x 40
- Uniform Coefficient: 1.9
- Hardness: 4 (Mohs scale)

Conditions for Operation

- Bed depth: 36 – 48 inches
- Freeboard: 50% of bed depth
- Service flow rate: 12 – 20 gpm/ft²
- Backwash flow rate: 16 – 18 gpm/ft²
- Backwash bed expansion 30 – 40%

Ordering Information

Part Number	Description
CSM-SUPERTRAP	SuperTRAP [®] high performance zeolite filter media (1 cubic foot bag)
CSM-SUPERTRAP-SS	SuperTRAP [®] high performance zeolite filter media (2000 lb. super sack)

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CASCADIAN® SuperTRAP® Vessel Loading Information

Vessel Diameter Inches (cm)	Media Quantity CSM-SUPERTRAP Ft ³ (m ³)	Under Bed FG1 Lbs (kg)	Service Flow Rate gpm (lpm)	Backwash Flow Rate gpm (lpm)
9 (22.9)	1 (.028)	12 (5.4)	5-9 (18-34)	5 (19)
10 (25.4)	1.5 (.042)	15 (6.8)	7-10 (26-37)	7 (26)
12 (30.5)	2 (.056)	25 (11.3)	9-15 (34-57)	10 (38)
13 (33.0)	2.5 (.07)	30 (13.6)	11-18 (42-68)	12 (45)
14 (35.6)	3 (.085)	40 (18.1)	13-21 (49-80)	15 (57)
16 (40.6)	4 (.11)	55 (24.9)	17-28 (64-106)	20 (76)
18 (45.7)	5 (.14)	80 (36.2)	20-35 (76-132)	25 (95)
21 (53.3)	7 (.17)	100 (45.2)	29-48 (109-181)	35 (132)
24 (61.0)	8 (.22)	200 (90.7)	38-62 (144-235)	40 (151)
30 (76.2)	10 (.28)	300 (136.1)	59-98 (223-371)	60 (227)
36 (91.4)	20 (.56)	500 (226.8)	85-140 (322-530)	85 (322)
42 (106.7)	30 (.85)	700 (317.5)	115-190 (435-719)	110 (416)
48 (121.9)	40 (1.13)	900 (408.2)	150-250 (568-946)	150 (568)

CASCADIAN® SuperTRAP® vs. Multimedia - 24" Diameter Vessel

	SuperTRAP®	Multimedia
Max Service Flow	63 gpm	47 gpm
Backwash Required	40 gpm	40 gpm
Filter Performance	< 5 micron	12 - 15 micron
Loading Capacity	2X	1X
Media Shipping Weight	640 lbs.	945 lbs.

CASCADIAN® SuperTRAP® media simplifies filter design, installation and performance while costing about 33% less to ship than multimedia.

