

Series 4500

ODIS MULTI MEDIA FILTERS

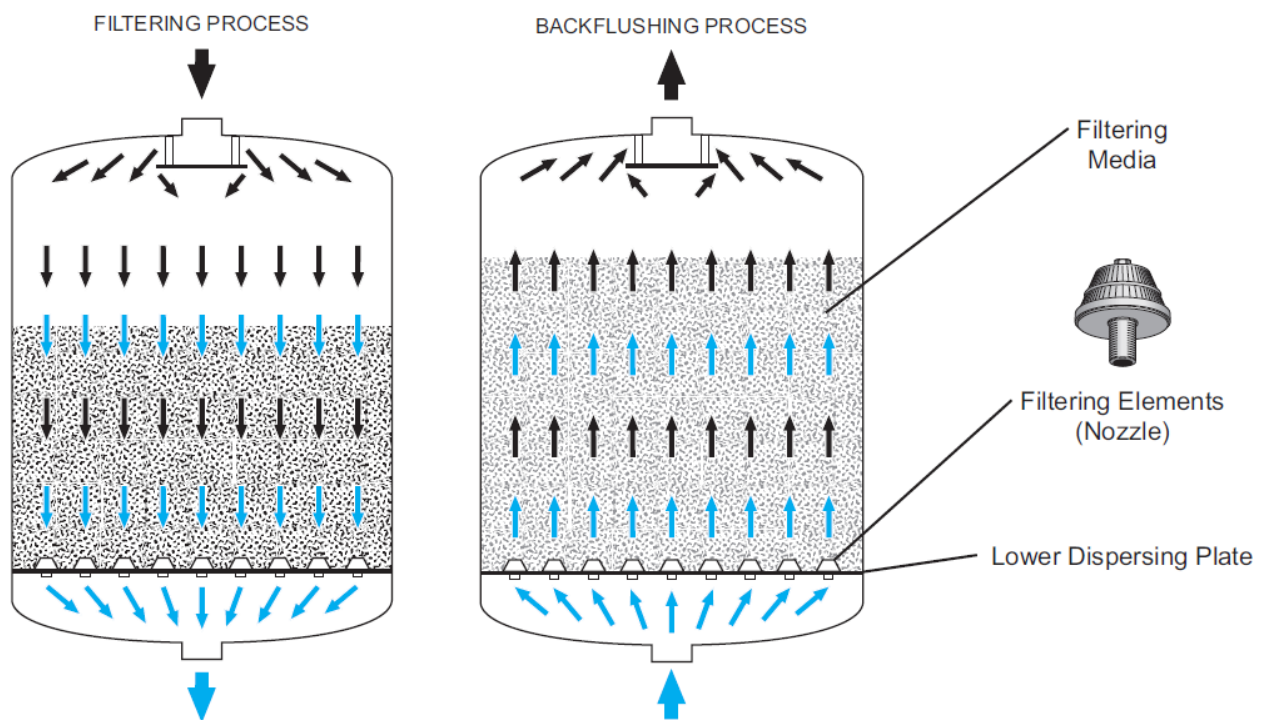
ODIS M-M filters are suitable for the widest range of applications and particularly effective for removal of organic and/or inorganic suspended solids from water down to 5 micron and below.

The Deep Bed, multimedia filters are suited for many applications as re-use applications, water pre-treatment applications for reverse osmosis and de-ionization systems, granular activated carbon, production of drinking water, Iron & Manganese removal from surface, ground or well water, waste water tertiary treatment, swimming pools filtration, cooling water side stream recycling etc.

Odus M-M filters (series 4500) use a unique design of a double chamber, divided by a welded reinforced steel plate.

The upper chamber contains the media; the lower chamber is empty and collects the filtered water. The plate is covered by "mushroom" type diffusers which are PP, slotted conical units. They disperse the water uniformly, using the whole media volume effectively, avoiding the occurrence of channeling or caking when operated correctly.

The backwash process is designed to clean the filter media. The flow direction is reversed and the flow rate is increased, thus causing a turbulent expansion of the multimedia as a fluidized bed. The backwash process flushes out the entrapped debris effectively. After the backwash is completed, there is a direct wash and then the filter resumes its normal filtering mode as clean as a new filter. Air scour option is available if required.



Material of Construction:

All filters installed in the filtration systems are manufactured from robust carbon steel ASTM-A570-GR36. They ensure long lasting system operating life.

Protective Coating:

The coating process provides ODIS products with maximum anti-corrosion protection.

For filters up to 60" (included) the coating process is performed in seven stages, as follows:

- 1st stage: Automated shot blast cleaning of products to a level of SA 2.5 as per international standard ISO 8501.
- 2nd stage: Phosphatization.
- 3rd stage: Rinsing.
- 4th stage: Sealing.
- 5th stage: Drying.
- 6th stage: Electrostatic polyester/epoxy spraying.
- 7th stage: Oven curing.

This process creates a perfectly coated product with a protective layer of 100 micron.

For filters 72" & bigger, the coating process includes two stages, as follows:

- Stage 1: Automated shot-blast cleaning to a level of SA 2 ½ as per ISO 8501.
- Stage 2: Internal coating of 2-3 layers with epoxy paint.

This lining process creates a perfectly coated product with a protective layer of 150-200 micron.

Operation:

- Normal working conditions are obtained when headloss is less than 0.3 bar (5 psi) at a clean filter.
- If head loss exceeds 0.3 bar (5 psi) - filter is either partially clogged or operating under an excessive flow rate.
- Filters back flushing: The flushing process starts automatically, according to one of the following criteria:
 - Differential pressure between the inlet and outlet of the filters (DP=5m).
 - A preset time interval elapses.
 - Manually activated by operators demand.

Filtration Areas

| Model | Body diameter | | Filtration area | |
|--------------------|---------------|------|-----------------|-------------------|
| | Inch | mm | m ² | Feet ² |
| 45008 DW/DWL/SPA/G | 8" | 220 | 0.040 | 0.430 |
| 45010 DW/DWL/SPA/G | 10" | 273 | 0.060 | 0.645 |
| 45012 DW/DWL/SPA/G | 12" | 324 | 0.080 | 0.861 |
| 45016 DW/DWL/SPA/G | 16" | 390 | 0.120 | 1.292 |
| 45020 DW/DWL/SPA/G | 20" | 480 | 0.180 | 1.937 |
| 45024 DW/DWL/SPA/G | 24" | 610 | 0.290 | 3.121 |
| 45030 DW/DWL/SPA/G | 30" | 750 | 0.440 | 4.736 |
| 45036 DW/DWL/SPA/G | 36" | 900 | 0.640 | 6.888 |
| 45048 DW/DWL/SPA/G | 48" | 1200 | 1.130 | 12.163 |
| 45055 DW/DWL/SPA/G | 55" | 1400 | 1.540 | 16.576 |
| 45060 DW/DWL/SPA/G | 60" | 1540 | 1.860 | 20.020 |
| 45072 DW/DWL/SPA/G | 72" | 1800 | 2.540 | 27.340 |
| 45080 DW/DWL/SPA/G | 80" | 2000 | 3.140 | 33.798 |
| 45090 DW/DWL/SPA/G | 90" | 2200 | 3.800 | 40.902 |
| 45100 DW/DWL/SPA | 100" | 2500 | 4.910 | 52.849 |
| 45120 DW/DWL/SPA | 120" | 3000 | 7.070 | 76.099 |

- Filter diameters over 1600 mm (64") feature an 18" dia. Manhole.

Dimensions:

Model DW (Cylinder height 1400 mm):

| Model | Body diameter | | Ø D (mm) | Ø d (inch) | Ø d1 (inch) | Ø d2 (inch) | H (mm) | H1 (mm) | H2 (mm) |
|----------|---------------|------|-------------|---------------|----------------|----------------|-----------|------------|------------|
| | Inch | mm | | | | | | | |
| 45008 DW | 8" | 220 | 220 | 1" | 1" | 1" | 1770 | 300 | 1620 |
| 45010 DW | 10" | 273 | 273 | 1.5" | 1" | 1.5" | 1820 | 300 | 1500 |
| 45012 DW | 12" | 324 | 324 | 2" | 1" | 2" | 1800 | 300 | 1500 |
| 45016 DW | 16" | 390 | 390 | 2" | 1" | 2" | 1800 | 300 | 1450 |
| 45020 DW | 20" | 480 | 480 | 2" | 1" | 2" | 1925 | 300 | 1450 |
| 45024 DW | 24" | 610 | 610 | 2" | 1" | 2" | 1925 | 300 | 1450 |
| 45030 DW | 30" | 750 | 750 | 2" | 2" | 2" | 1875 | 350 | 1520 |
| 45036 DW | 36" | 900 | 900 | 2" | 2" | 2" | 1880 | 350 | 1520 |
| 45048 DW | 48" | 1200 | 1200 | 3" | 2" | 3" | 2000 | 450 | 1550 |
| 45055 DW | 55" | 1400 | 1400 | 4" | 2" | 4" | 2180 | 600 | 1550 |
| 45060 DW | 60" | 1540 | 1540 | 4" | 2" | 4" | 2200 | 600 | 1550 |
| 45072 DW | 72" | 1800 | 1800 | 6" | 2" | 6" | 2530 | 870 | 1600 |
| 45080 DW | 80" | 2000 | 2000 | 6" | 2" | 6" | 2570 | 870 | 1720 |
| 45090 DW | 90" | 2200 | 2200 | 6" | 2" | 6" | 2600 | 890 | 1740 |
| 45100 DW | 100" | 2500 | 2500 | 8" | 2" | 8" | 2730 | 950 | 1900 |
| 45120 DW | 120" | 3000 | 3000 | 8" | 2" | 8" | 3560 | 1250 | 2250 |

Model DWL (Cylinder height 2000 mm):

| Model | Body diameter | | Ø D (mm) | Ø d (inch) | Ø d1 (inch) | Ø d2 (inch) | H (mm) | H1 (mm) | H2 (mm) |
|-----------|---------------|------|-------------|---------------|----------------|----------------|-----------|------------|------------|
| | Inch | mm | | | | | | | |
| 45008 DWL | 8" | 220 | 220 | 1" | 1" | 1" | 2370 | 300 | 2220 |
| 45010 DWL | 10" | 273 | 273 | 1.5" | 1" | 1" | 2420 | 300 | 2100 |
| 45012 DWL | 12" | 324 | 324 | 2" | 1" | 1.5" | 2400 | 300 | 2100 |
| 45016 DWL | 16" | 390 | 390 | 2" | 1" | 2" | 2400 | 300 | 2050 |
| 45020 DWL | 20" | 480 | 480 | 2" | 1" | 2" | 2525 | 300 | 2050 |
| 45024 DWL | 24" | 610 | 610 | 2" | 1" | 2" | 2525 | 300 | 2050 |
| 45030 DWL | 30" | 750 | 750 | 2" | 2" | 2" | 2475 | 350 | 2120 |
| 45036 DWL | 36" | 900 | 900 | 2" | 2" | 2" | 2480 | 350 | 2120 |
| 45048 DWL | 48" | 1200 | 1200 | 3" | 2" | 2" | 2600 | 450 | 2150 |
| 45055 DWL | 55" | 1400 | 1400 | 4" | 2" | 2" | 2780 | 600 | 250 |
| 45060 DWL | 60" | 1540 | 1540 | 4" | 2" | 2" | 2800 | 600 | 2150 |
| 45072 DWL | 72" | 1800 | 1800 | 6" | 2" | 3" | 3130 | 870 | 2200 |
| 45080 DWL | 80" | 2000 | 2000 | 6" | 2" | 3" | 3170 | 870 | 2320 |
| 45090 DWL | 90" | 2200 | 2200 | 6" | 2" | 3" | 3200 | 890 | 2340 |
| 45100 DWL | 100" | 2500 | 2500 | 8" | 2" | 3" | 3330 | 950 | 2500 |
| 45120 DWL | 120" | 3000 | 3000 | 8" | 2" | 3" | 4160 | 1250 | 2850 |

Model SPA (Cylinder height 1150 mm):

| Model | Body diameter | | Ø D (mm) | Ø d (inch) | Ø d1 (inch) | Ø d2 (inch) | H (mm) | H1 (mm) | H2 (mm) |
|-----------|---------------|------|-------------|---------------|----------------|----------------|-----------|------------|------------|
| | Inch | mm | | | | | | | |
| 45008 SPA | 8" | 220 | 220 | 1" | 1" | 1" | 1520 | 300 | 1370 |
| 45010 SPA | 10" | 273 | 273 | 1.5" | 1" | 1" | 1570 | 300 | 1250 |
| 45012 SPA | 12" | 324 | 324 | 2" | 1" | 1.5" | 1550 | 300 | 1250 |
| 45016 SPA | 16" | 390 | 390 | 2" | 1" | 2" | 1550 | 300 | 1200 |
| 45020 SPA | 20" | 480 | 480 | 2" | 1" | 2" | 1675 | 300 | 1200 |
| 45024 SPA | 24" | 610 | 610 | 2" | 1" | 2" | 1675 | 300 | 1200 |
| 45030 SPA | 30" | 750 | 750 | 2" | 2" | 2" | 1625 | 350 | 1270 |
| 45036 SPA | 36" | 900 | 900 | 2" | 2" | 2" | 1630 | 350 | 1270 |
| 45048 SPA | 48" | 1200 | 1200 | 3" | 2" | 2" | 1750 | 450 | 1300 |
| 45055 SPA | 55" | 1400 | 1400 | 4" | 2" | 2" | 1930 | 600 | 1300 |
| 45060 SPA | 60" | 1540 | 1540 | 4" | 2" | 2" | 1950 | 600 | 1300 |
| 45072 SPA | 72" | 1800 | 1800 | 6" | 2" | 3" | 2280 | 870 | 1350 |
| 45080 SPA | 80" | 2000 | 2000 | 6" | 2" | 3" | 2320 | 870 | 1470 |
| 45090 SPA | 90" | 2200 | 2200 | 6" | 2" | 3" | 2350 | 890 | 1490 |

Model G (Cylinder height 980 mm):

| Model | Body diameter | | Ø D (mm) | Ø d (inch) | Ø d1 (inch) | Ø d2 (inch) | H (mm) | H1 (mm) | H2 (mm) |
|---------|---------------|------|-------------|---------------|----------------|----------------|-----------|------------|------------|
| | Inch | mm | | | | | | | |
| 45008 G | 8" | 220 | 220 | 1" | 1" | 1" | 1350 | 300 | 1200 |
| 45010 G | 10" | 273 | 273 | 1.5" | 1" | 1" | 1400 | 300 | 1080 |
| 45012 G | 12" | 324 | 324 | 2" | 1" | 1.5" | 1380 | 300 | 1080 |
| 45016 G | 16" | 390 | 390 | 2" | 1" | 2" | 1380 | 300 | 1030 |
| 45020 G | 20" | 480 | 480 | 2" | 1" | 2" | 1505 | 300 | 1030 |
| 45024 G | 24" | 610 | 610 | 2" | 1" | 2" | 1505 | 300 | 1030 |
| 45030 G | 30" | 750 | 750 | 2" | 2" | 2" | 1455 | 350 | 1100 |
| 45036 G | 36" | 900 | 900 | 2" | 2" | 2" | 1460 | 350 | 1100 |
| 45048 G | 48" | 1200 | 1200 | 3" | 2" | 2" | 1580 | 450 | 1130 |
| 45055 G | 55" | 1400 | 1400 | 4" | 2" | 2" | 1760 | 600 | 1130 |
| 45060 G | 60" | 1540 | 1540 | 4" | 2" | 2" | 1780 | 600 | 1130 |
| 45072 G | 72" | 1800 | 1800 | 6" | 2" | 3" | 2110 | 870 | 1180 |
| 45080 G | 80" | 2000 | 2000 | 6" | 2" | 3" | 2150 | 870 | 1300 |
| 45090 G | 90" | 2200 | 2200 | 6" | 2" | 3" | 2180 | 890 | 1320 |

