

## Proper Selection of ODIS Filters

ODIS Irrigation equipment Ltd manufactures filters, separators, manifolds, filtering equipment and modular filter arrays, designed to achieve the highest standards of quality and finish, thus providing long lasting, reliable and trouble-free operation.

To obtain the desired level of filtering quality, appropriate filtering equipment must be selected, taking into consideration the water source and the varying types and quantities of water impurities. It should always be kept in mind that there is no single filtering system that filters all kinds of water impurities.

To help make a preliminary choice of filters, the main points to consider are:

- Irrigation system (sprinklers, micro sprinklers or drip irrigation).
- Type and quantity of impurities in the water.
- Required flow rate (capacity).
- Required filtration (mesh size or microns).
- Maximum and minimum water pressure.
- Future needs and modification.

After selecting the filters that suit your water quality requirements, considering the above mentioned points, the decision for ordering a modular array will be based on standard Odis products.

These modular filters make future modifications easy and at minimal cost, (See Chapter 1 - Arrays).

For best results, the filters, manifolds and accessories must be correctly assembled and properly operated, according to the instruction leaflet provided with each filter.

General recommendations are provided here to help you select the correct filters and their combinations in accordance with the level of water impurities.

### 1. Sand Mainly in wells

- A. Hydrocyclones (series 5000)
- B. Hydrocyclones (series 5000) combined with Odismatic filters (series 850, 851, 852, 860, 862, 863) or with automatic filters (series 8000).
- C. Automatic filters (series 8000) or Circulating filters (series 3000) –for water containing relatively small quantities of sand.

### 2. Algae, organic and suspended matter (Rivers, lakes, reservoirs)

- A. Gravel filters (series 4000) combined with Control filters (series 1900).
- B. Gravel filters (series 4000) combined with Odismatic filters (series 850, 851, 852, 860, 862, 863).
- C. Gravel filters (series 4000) combined with back flushing filters (series 7000).

### 3. Rivers containing large quantities of silt and algae

- A. Hydrocyclones (series 5000) followed by Gravel filters (series 4000) and control filters (series 1900).

- B. Hydrocyclones (series 5000) followed by Gravel filters (series 4000) and Automatic filters (series 8000).
- C. Hydrocyclones (series 5000) followed by Gravel filters (series 4000) combined with backflushing filters (Series 7000)

#### 4. Clay with or without organic matter

- A. Hydrocyclones (series 5000) followed by Gravel filters (series 4000) and Automatic filters (series 8000) or with circulating filters (series 3000) or with control filter (series 1900).  
Special attention should be given to the water flow rate –it should be relatively low in the gravel filters.

#### 5. Iron (or Manganese) Oxides\*

- A. Gravel filters (series 4000) containing multi media at minimal recommended flow rate combined with automatic filters (series 8000) or with circulating filters (series 3000) or with control filters (series 1900).  
If necessary water should be chlorinated.

#### 6. Reclaimed water (reservoirs)\*

- A. Gravel filters (series 4000) combined with automatic filters (series 8000) or with circulating filters (series 3000).
- B. Odismatic filters (series 850,851,852-860,862,863) when the dirt load is not above 50 p.p.m.  
Prefiltration might be needed

\* In such a case please consult ODIS technical department.

Type of Dirt	Filtration Solutions
Sand (Wells)	Hydrocyclone Separators Automatic Circulation Filters
Algae Organic Matter (River water, Reservoirs)	Media Filters OdisMatic® Filters Automatic Circulation Filters (According to dirt quantities)
Suspended Solids Silt (Rivers, Lakes, Channels)	Media Filters
Wastewater Reuse (Wastewater after secondary treatment)	Multi-Media Filters OdisMatic® Filters (According to dirt quantities)
Iron and Manganese Removal (Wells)	Oxidation (by chemical treatment or air) And Multi-Media Filtration
Greenhouses Leachate Recycling	Multi-Media Filtration and Disinfection (by UV, chlorine, ozone)