

SELF-CLEANING GRAVITY FILTER SERIES 188

GENERAL DESCRIPTION

Series 188 gravity screen filters are a continuous self-cleaning gravity filters.

This self-cleaning filters use a method of filtering water by gravity through a screen platform.

The filters are designed to automatically remove dirt from screen during filtration process without interrupting to filtered water supply.

TECHNICAL SPECIFICATION

- Working flow rate: up to 230 m³/h (1015 g.p.m)
- Screen Grade: 120 micron (other screen grades are available)
- Water Jet System pressure: 1 bar (15 psi)
- Water Jet System flow rate: 1 m³/h (4.4 g.p.m)

MODELS SPECIFICATION

Model	Inlet/Outlet diameter		Body diameter	Max. Flow Rate	
	Inch	mm	Inch	m ³ /h	gpm
18848	8	150	48	100	440
18860	8	150	60	170	750
18872	10	200	72	230	1015

CONSTRUCTION

Filter Body: Carbon Steel protected by 100 micron protective coating of extra durable polyester layer, applied electrostatically on a zinc-phosphate layer and oven cured for maximal anti-corrosion protection.

(Optional: stainless steel for different process requirements)

Screen Assembly - (support & screen): stainless steel 316.

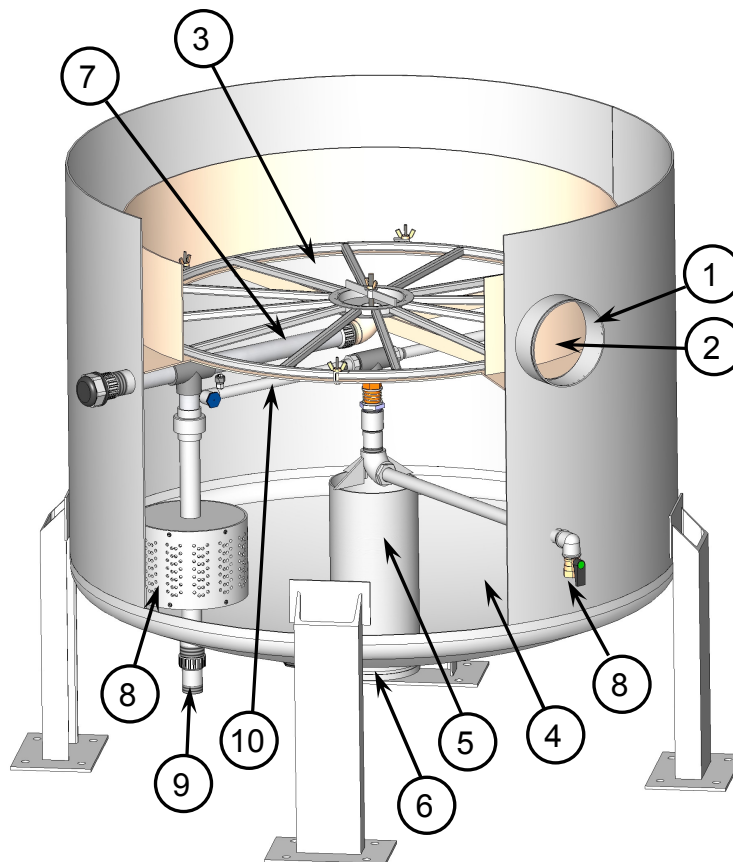
Dirt removal unit: P.V.C

Jet Assembly: Pipe - P.V.C, Jets – Plastic.

OPERATING PRINCIPLES

Filtration

Raw water enters to the filter through the inlet port (1) and is spread in the perimeter canal (2). The water flows over the peripheral canal partition and falls down on the horizontal screen (3). The water is filtered by gravity through the screen and collected in the collecting chamber (4). When the filtered water level in the collecting chamber rises above the outlet port sleeve (5), the filtered water flows out through the outlet port (6) to consumption. The filtered water level is controlled by differential level float which controls the raw water supply according to filtered water consumption flow rate.



Self Cleaning Pattern

The dirt that accumulates on the horizontal screen (3) is flushed with the raw water that flows over the screen into the dirt collector in the center of the screen to the dirt collector pipe (7). The dirt is accumulated in the dirt collecting chamber (8). The raw water which flushed the dirt into the dirt collecting chamber is filtered into the filtered water collecting chamber (4) through the dirt collecting chamber side wall (8). The dirt is evacuated from the dirt collecting chamber through evacuation port (9).

A water jet system (10) is installed inside the filter under the screen. The jet system is operated by external water pressure source which is connected and controlled through manual valve (8).

Note: it is also possible to use pressurized filtered water from the filtered water chamber in order to operate the jet system.

The water jet system is equipped with heavy duty bearing which ensures continuous smooth long standing operation.

During the self-cleaning operation the water jet system (10) rotates and sprays water under pressure upwards all over the screen.

The combined flow of the water from the water jet system that helps to remove the stubborn heavy dirt from the screen, and the horizontal flow of the raw water that flows over the peripheral canal partition, sweeps the dirt to the dirt collecting chamber (8).

ODIS FILTERING L.T.D
ISRAEL ,49130 P.O.B 3137, KIRIAT ARYE, PETACH-TIKVA
TEL: 972-3-9258503
FAX: 972-3-9214515
Website: www.odisfiltering.com E-mail: odis@odisfiltering.com