Self Cleaning Filter
USCF Series

FOR WATER APPLICATION, ALTERNATIVE TO EXPENSIVE AUTO-CLEANING FILTER SYSTEM

Our USCF self cleaning filters are designed to meet a wide range of industrial applications for water filtration in process water, sea water, recycle water as well as waste treatment etc, it is also suitable for high pressure and high temperature application.

The systems are completed with a wide choice of Stainless Steel screens with PLC controller and flash valve, for large flow requirement, it can be set up in parallel installation.

The filter bodies are available in stainless steel and carbon steel with ETFE coating.

Clean filter pressure drop with 100µ screen is less than 1psi at the rated flow of the filter.

Features

Alternative to expensive auto cleaning system

Continuous Flow

Maintenance Free

Low Pressure Drop

Specification

- Line Sizes: 2" - 36"
- Flow Rate up to 4,000 m3/hr
- Screen Opening: 10µ - 4,000µ
- Material: SS 304, SS316, Carbon Steel or special material
- Pressure: 40 - 150 psi
- Temperature to: 100 deg C
- Flush Valve Size: 1", 2"
- Flush Flow Rate: 10 – 36 m3/hr
- Flush Duration: 5 - 10 seconds
- Flushing Volume: 30-100 litre

Working Principle -

USCF Self Cleaning Filter System consists of a filter body with two stages of filtration – coarse screen and fine screen, a flushing valve, differential pressure switch and a PLC controller.

First of all, unfiltered water enters the system and travel through the coarse screen, to remove large particle of more than 3/8" size, it then flow though the inner surface of fine screen where small contaminants down to 10 microns are retained, the clean water exist though the outlet of the filter.

When the fine screen loaded with contamination, a differential pressure of 7 psi (suggest setting) detected causing the PLC controller to open the flush valve, it cause the reverse flow at the point of nozzle, to remove the contaminants out of flush valve.

The cleaning system takes about less than 12 seconds, during the cleaning operation, the filtration process is not interrupted.

Installation –