



Pre-filtration with Vats "bonflow" – An effective way for Optimizing RO performance.

Reverse Osmosis (RO) is the world's latest water treatment technology. No doubt, that RO is

Background : RO membranes are having very small pore size that even salt molecules can

It is typically called membrane fouling. This will result into the reduction in flux i.e. permeate or incre

Most of the general-purpose applications like Water treatment industries, Drinking Water, etc. uses ch

Many of the time RO pre-filtration is needed as the recurring cost, so obviously cheapest eleme

Pre-requisite for continuous and consistent RO Functioning

Consistent Quality of feed which is pre treated for-

- Suspended Solids (Slit Density Index SDI < 5)

- Chemical Impurities which affects the membrane
- With Anti-scalent

Most of the time chemical impurities are taken care with pretreatment and antiscalent dosing. And f

RO Pre-Filtration

Most of the time spiral wound RO membrane manufacturers suggest for the $SDI > 5$ suspended solids to follow

- Fouling / Chocking of membrane
- Frequent cleaning of membrane
- Reduction in flux affects the production scheduling
- Increase in electrical consumption and
- Ultimately earlier replacement (within 2 years)

All above ultimately leads to higher per liter cost of production, may be 2 to 4 times higher than expected

Criteria for Comparing Different Filter Elements

A criterion for comparing filter elements is, generally, the “life” or service period per replacement of

The true comparison for the filter elements should be based on -

- Quality – NTU, SDI, etc.
- Throughput at what quality level
- Consistency within same elements and for consecutive replacement
- Disposal hassles
- Inventory
- Any other

Limitations of Existing PP Filter Elements

For general-purpose applications and by mistake, some times for critical application PP spun or PP woven

To avoid this offshoot many of the time, quality conscious people replace the filter elements well before it goes

Vats "bonflow" a Superior and Economical RO Pre-filtration

To overcome all above-mentioned ill effects, Vats "bonflow" filter elements are the best alternative.

By using Vats "bonflow" you can get water with SDI < 5 and well within the limit as per manufacturers

- Reduction in the flushing and cleaning frequency
- Increase the life of membrane (can go up to 5 years)
- Consistency in through-put
- Longer life of Pre filters due to graded density construction

Leads to overall smoothing of operation and ultimately result to

Vats "bonflow" Cartridges Filters as RO Pre- filters - A possibility of Saving Cost

[Click For Chemical Compatability Chart](#)