

APPLICATION: Sand-Filter Pre-filtration

Why process?

Sand filters are very much used in industrial applications for filtration of surface or well water or for some process water qualities.

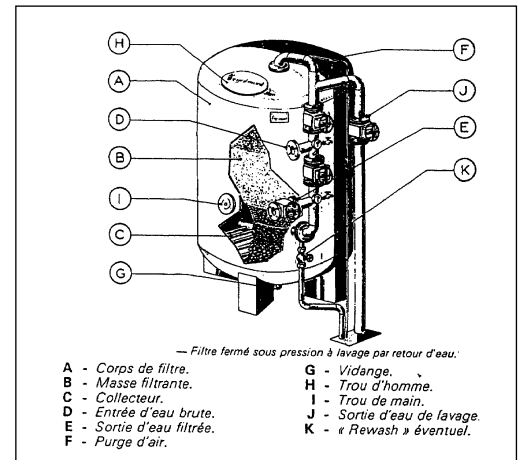
Required capacities often increased since installation of the filters that become undersized.

“Undersizing” of a sand filter can be easily checked when considering its specific flow rate is about $10 \text{ m}^3/\text{m}^2/\text{h}$. The considered surface is perpendicular to the flow direction.

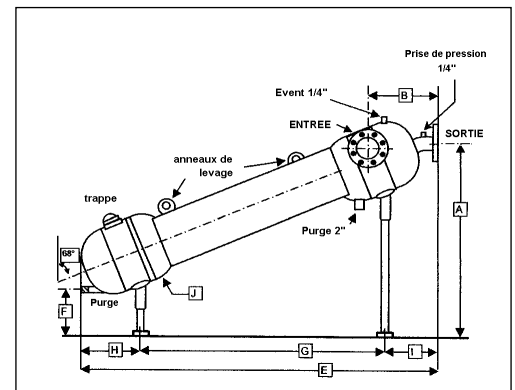
Which process?

A cheap solution consists in installing upstream pre-filtration reducing the suspended material content. In turn this increase the time period between backflush cleanings.

Application: Liquid/Solid Sand Filter Pre-filtration



Filtre à sable (schéma issu du guide Degrémont)



Séparateur cyclonique incliné LEFCO

Cyclonic separators are very often a favorable solution: this system contains no rotating part, does not require consumable and is fully automatic.

The automatic control indeed is very simple and consists only in cyclic control of the purge valve.

This improvement system extends the operational time of the sand filter, reduces water requirement for cleaning purpose and generally saves manpower time.