Case History no. 23 – Spring Water Bottler Expands Capacity

Fluid	: well water
Flow rate	: 6000 GPH
Pressure	: 3 – 4 bar
Temperature	: ambient
Line Size	: 2”
Rating	: 10µ & 7µ absolute

Problem:-
A client wanted to replace old housings and increase their bottling capacity whilst filtering down to 7 – micron absolute.

Solution: -
We supplied:
1 off 5 round x 40” long housings complete with 10µ absolute double open-ended depth filter.
1 off 5 round x 40” long housings complete with 7µ absolute double open-ended pleated filter.

Sizing:-
6000 GPH ÷ 60 = 100 GPH x 4.546 = 454.60 LPM
@ 10 LPM / 10” of cartridge = 45 – 46 off 10” lengths required
@ 20 LPM / 10” of cartridge = 22 off 10” lengths required

We ran with the higher flow-rate per 10” i.e. 5 x 40” = 20 off 10” equivalents which equates with 22.73 LPM per 10”

Note: - In designing a filter to be absolute rated, a flow-rate of 10 LPM as standard is used. At higher flow-rates the absolute rating is not applicable. At lower flow-rates efficiency will be enhanced.