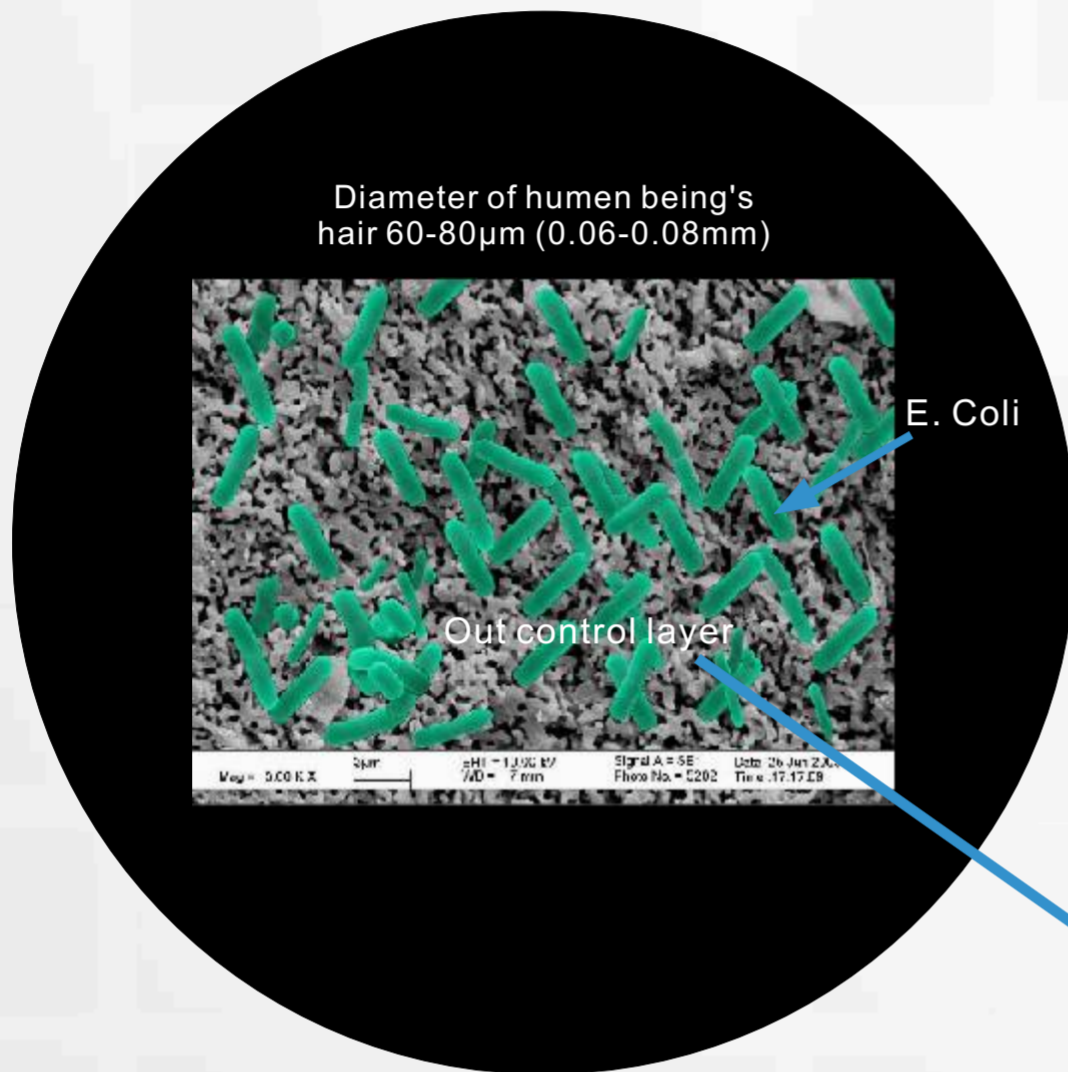


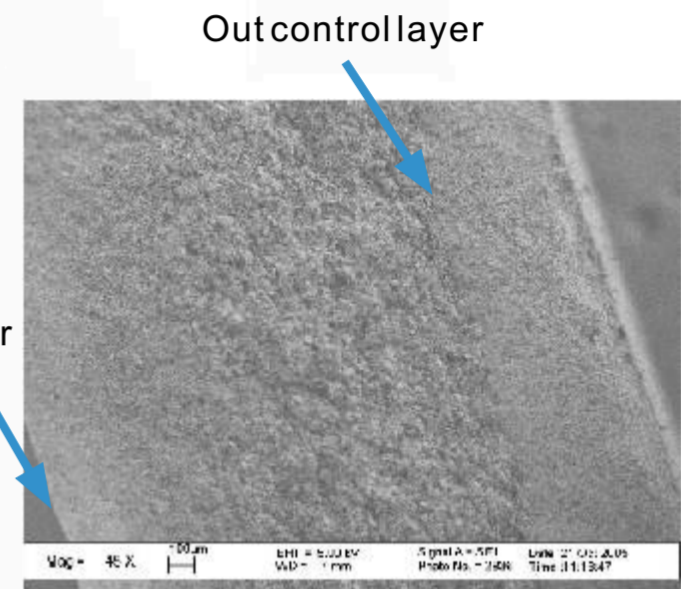


# Dual ceramic membranes cartridge

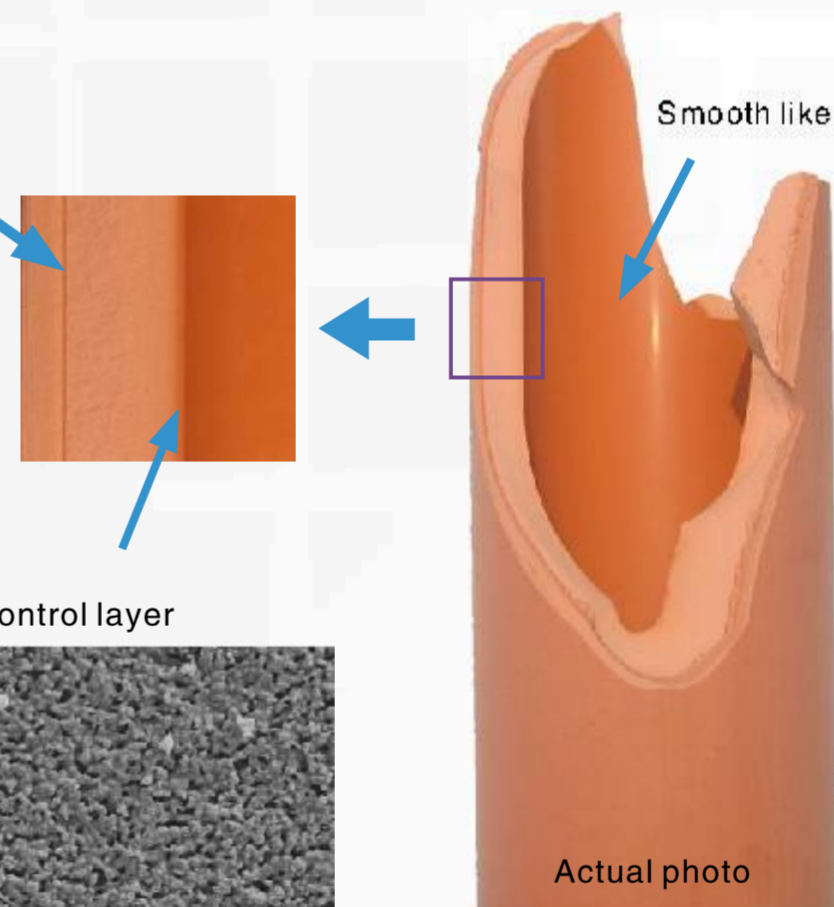
Dual ceramic membranes filter element invented by Dr. Xiandong Sui is the world best point of use ceramic filter elements which contain two layer ceramic membranes and made from 100% pure ceramic material. It can filter out particles down to 0.1µm—compare to the best commercial available ceramic



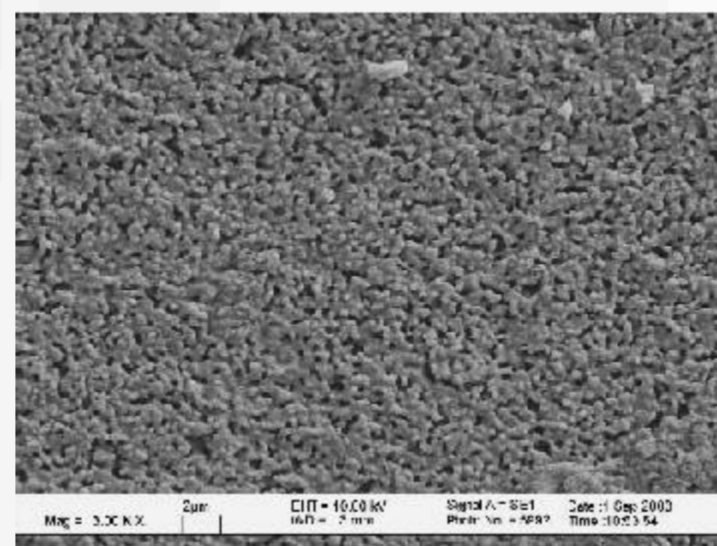
Hair, E. Coil and ceramic pore size after 3000 times magnification



Cross section SEM photo of the ceramic membrane cartridge × 45



Actual photo



SEM photo of the inner control layer × 3000



Patent No. ZL200510033632.9

## Features:

- Filtration fineness is just 0.1µm
- 99.9999% bacteria removing efficiency\*
- Dual ceramic membranes ,without recontamination
- Cleanable and long life time
- 100% natural ceramic material, safe and environment-friendly

Suit for: outdoor/portable water filter or household water filter

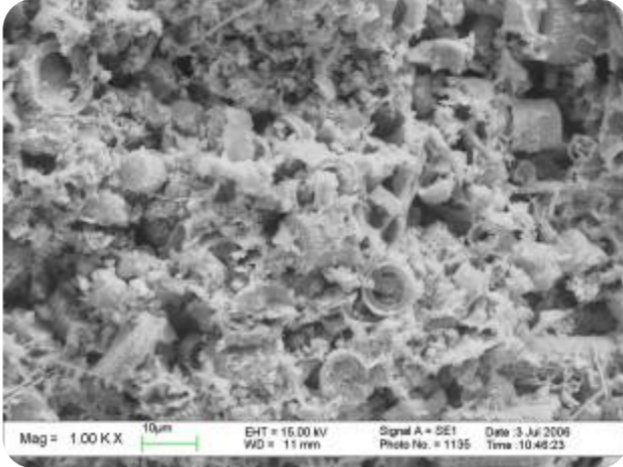
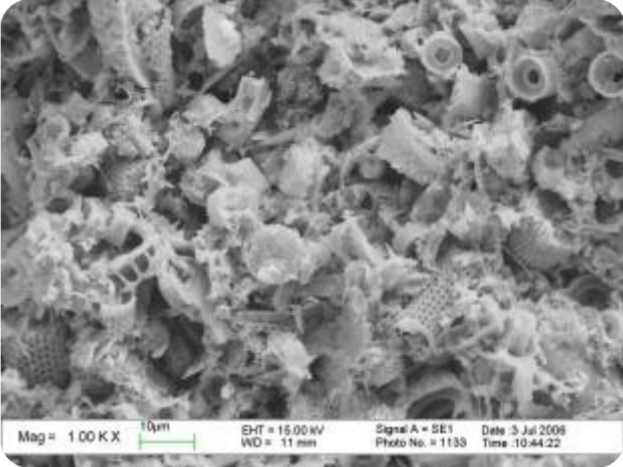
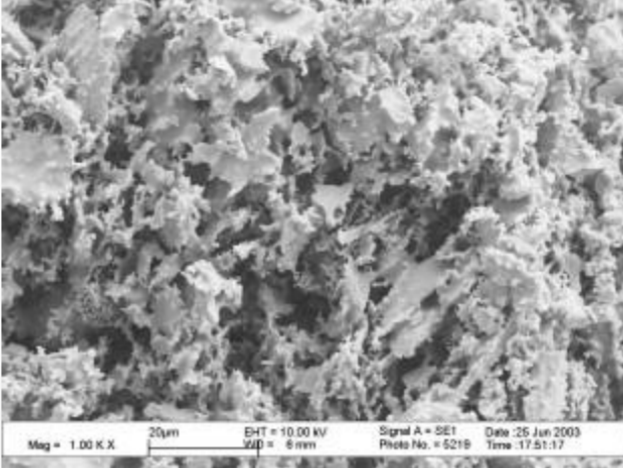
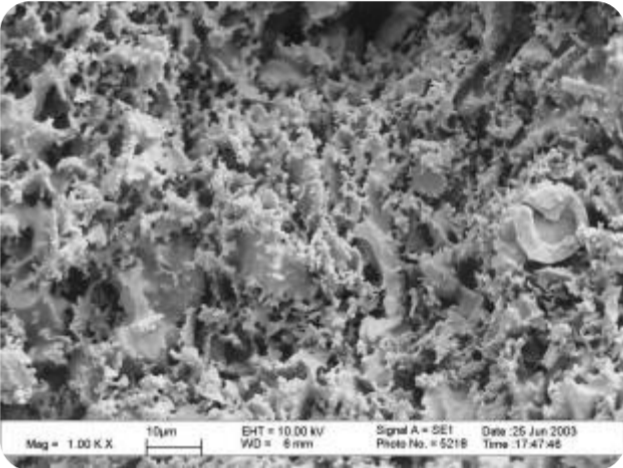
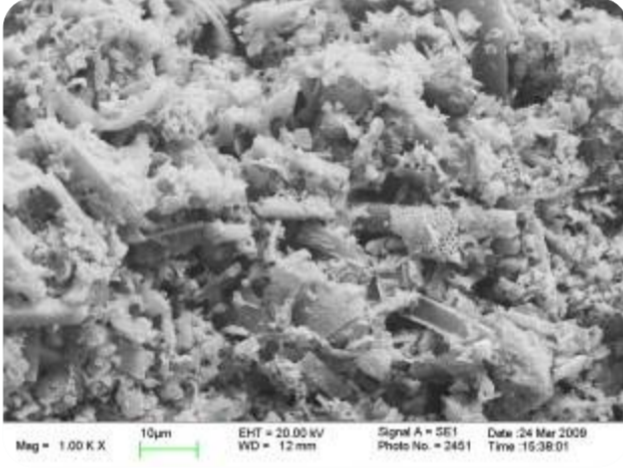
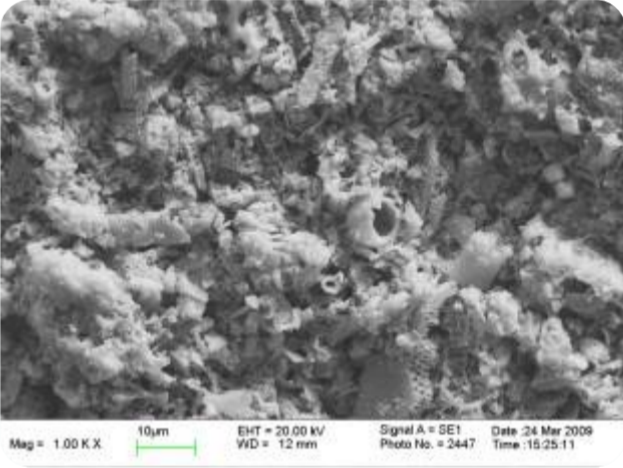
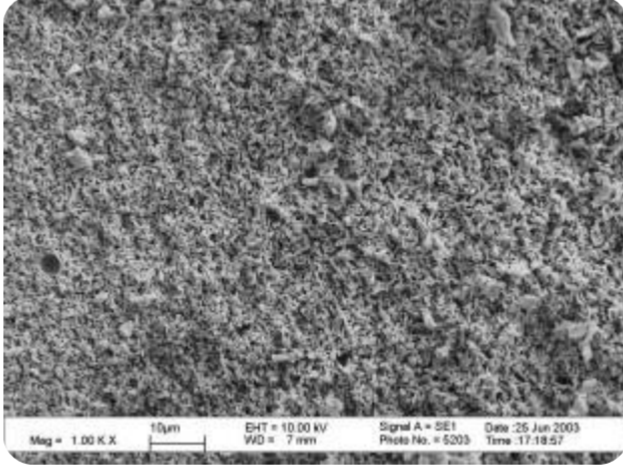
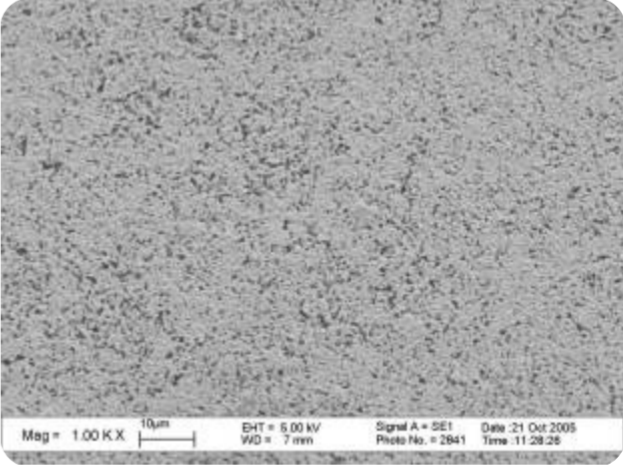
\* Escherichia coli, Staphylococcus aureus, Salmonella typhi, Vibrio cholerae, legionella pneumophila.



# Dual ceramic membranes cartridge

## Security for 99.9999% removal of bacteria

Table 1. The micro-structure comparison of the best commercial available ceramic filter after same SEM magnification( $\times 1000$ )

|          |   | Surface  | Cross section   |
|----------|---|--|---|
| Swiss    | Swiss made – filtration fineness is $0.2\mu\text{m}$    |    |    |
| England  | England made – filtration fineness is $0.2\mu\text{m}$  |   |   |
| USA      | USA made – filtration fineness is $0.2\mu\text{m}$      |  |  |
| PUREEASY | Pureeasy made – filtration fineness is $0.1\mu\text{m}$ |  |  |
|          |   | Out control layer  | Inner control layer   |

### The size of bacteria

| bacteria         | Size             | Diameter / $\mu\text{m}$ | Length / $\mu\text{m}$ | Width / $\mu\text{m}$ |
|------------------|------------------|--------------------------|------------------------|-----------------------|
| coccus           | micrococcus      | 0.5~2.5                  |                        |                       |
|                  | staphylococcus   | 0.5~1.5                  |                        |                       |
|                  | streptococcus    | 1.0~2.0                  |                        |                       |
| bacillus         | E. Coli          |                          | 2.0~6.0                | 0.6~1.5               |
|                  | anthrax bacillus |                          | 4.0~10.0               | 1.0~1.5               |
|                  | tetanus bacillus |                          | 4.0~8.0                | 0.4~0.6               |
| spirillum        | Vibrio cholerae  |                          | 1~3                    | 0.3~0.5               |
|                  | leptospira       |                          | 5~20                   | 0.1~0.2               |
| blue-green algae |                  | 3~15                     |                        |                       |
| yeast            |                  |                          | 5~30                   | 1~5                   |
| mould            |                  | 2~10                     |                        |                       |
| Cryptosporidium  |                  | 4~6                      |                        |                       |
| Giardia          | Cy t             | 7.5~9                    | 10~14                  |                       |
|                  | Trophozoite      | 2~4 Thickness            | 9.5~21                 | 5~15                  |



# Dual ceramic membranes cartridge

## Features:

- Filtration fineness: 0.1µm (99.9999% removal of bacteria\*)
  - Working temperature: 5-45°C (41-113°F)
  - Working pressure: 0.1-0.4MPa (1-4 bar/14.5-58 psi)
  - Suit for: outdoor/portable water filter
- \* Escherichia coli, Staphylococcus aureus, Salmonella typhi, Vibrio cholerae, legionella pneumophila.



### CM01-46250

Size: Φ46×250mm (9" or 10" )  
 Outlet : 1/4"  
 Capacity: 10,000L (2200Gallon)  
 Out flow rate: 2 L/min (0.2MPa)  
 Fitting type: screw-in type  
 Weight: 140g



### CM01-55250

Size: Φ55×250mm (9" or 10" )  
 Outlet : 1/4"  
 Capacity: 30,000L (6600Gallon)  
 Outflow rate: 3-4L/min(0.2MPa)  
 Fitting type: screw-in type  
 Weight: 200g



### CM01-55250C

Size: Φ55×250mm (9" or 10" )  
 Outlet : Φ20mm  
 Capacity: 30,000L (6600Gallon)  
 Outflow rate: 3-4L/min(0.2MPa)  
 Fitting type: plug-in type  
 Weight: 200g



### CM01-36200

Size: Φ36×200mm  
 Outlet: 1/4"  
 Capacity: 10,000L (2200Gallon)  
 Out flow rate: 2L/min (0.2Mpa)  
 Fitting type: screw-in type  
 Weight: 100g



### CM01-25120

Size: Φ25×120mm  
 Outlet: 1/4"  
 Capacity: 5000L (1100Gallon)  
 Out flow rate: 0.5 L/min  
 Fitting type: screw-in type  
 Weight: 45g



### CM01-23125C

Color: White / Red  
 Size: Φ23×125mm  
 Outlet: Φ20mm  
 Capacity: 5000L (1100Gallon)  
 Outflow rate: 0.5 L/min  
 Fitting type: plug-in type  
 Weight: 45g

# Micro ceramic membranes cartridge

## Features:

- 0.5-1.0 µm filtration fineness
- Remove rusts, worms, algae and other suspended contaminants
- Cleanable cartridge and no recontamination
- 100% natural ceramic material, safe and environment-friendly
- Suit for: Faucet water filter



### CM05-Z46120

Filtration fineness: 0.5µm  
 Size: Φ46×120mm  
 Outlet: 1/4"  
 Capacity: 10,000L (2200Gallon)  
 Outflow rate: 8L/min(0.2MPa)  
 Fitting type: screw-in type  
 Weight: 90g



### CM05-Z3976C

Filtration fineness: 0.5µm  
 Size: Φ39×76mm  
 Outlet : Φ15mm  
 Capacity: 5000L (1100Gallon)  
 Outflow rate: 6L/min(0.2MPa)  
 Fitting type: Plug-in type  
 Weight: 40g



### CM10-Z3976C

Filtration fineness: 1.0 µm  
 Size: Φ39×76mm  
 Outlet : Φ15mm  
 Capacity: 8000L (1760Gallon)  
 Outflow rate: 6L/min(0.2MPa)  
 Fitting type: Plug-in type  
 Weight: 40g



### CM03-P12310

Filtration fineness: 0.3 µm  
 Size: Φ123×10mm  
 Outlet: 1/4"  
 Capacity: 2,000L (440Gallon)  
 Outflow rate: 3-4L/h(250 mm hydrostatic pressure)  
 Fitting type: screw-in type  
 Weight: 140g

Same pore size, larger flow rate: Same flow rate, smaller pore size