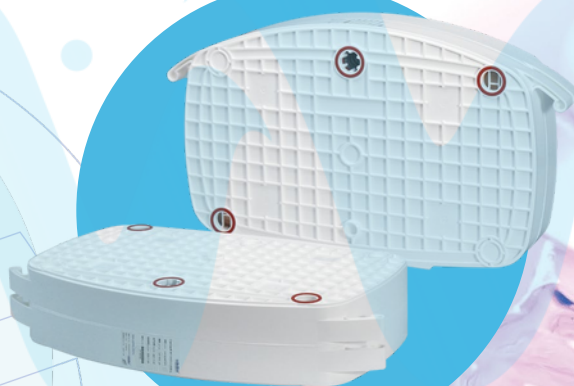




cobetter[®]
— filtration —

Depth Filtration

ClaricapCSD & RoheapCSD



LA PUR WASSER
DE MÉXICO S.A. DE C.V.





Claricap CSD & Roheap CSD

Depth Filtration Series

Cobetter Claricap CSD & Roheap CSD series filter is composed of high purity lignocellulose and inorganic filter aid agent by special technology. Its three-dimensional inner structure makes it to be a depth filter medium while providing excellent filtration efficiency and high dirt holding capacity.

Filter paper is manufactured using super-matic production lines. All raw materials are tested by a strict quality control process to ensure filter quality and good performance in any application.

Excellent Retention Efficiency

Claricap CSD & Roheap CSD Series Filter has three-dimensional inner structure, and the pore size decreases gradually as the depth increases, the flow rate of the solid particles will be reduced which allows them to be collected.

Diatomaceous earth-as an inorganic filter aid, its natural porous structure provides a good particle adsorption effect and increases the permeability of paperboard.

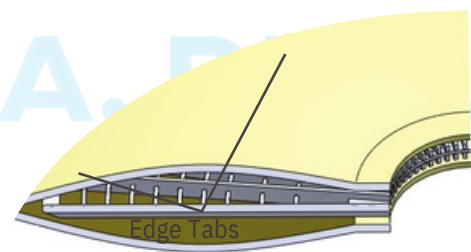
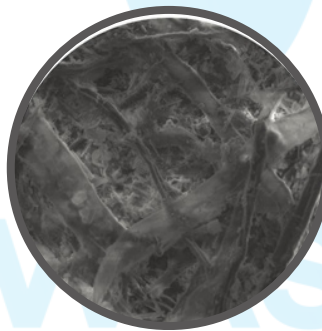
There's a small amount of synthetic resin in the filter paper which can not only improve the wet strength of the paper, but also provides a positive charge that ensure the adsorb efficiency.

Excellent Characteristics

Using a high purity cellulose, reducing the level of ion precipitation and endotoxin makes the CSD Series suitable for biopharmaceutical and other high purity applications. The filter designs solve many of the problems found in typical disk-style filters such as leakage, heavy use, and high costs. The filter aid agent in the filter paper creates an inner crisscrossing three-dimensional structure which ensures a higher dirt holding capacity and longer lifetime.

Applications

- Fermentation broth and cell culture media clarification filtration
- Serum and blood products filtration
- Enzyme preparation filtration
- Particle removal filtration
- Colloidal and viscous materials filtration



Internal Support

Flow Channels

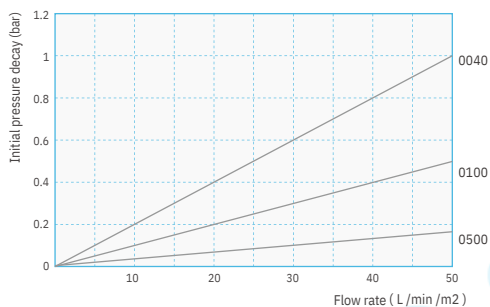


Material of Construction

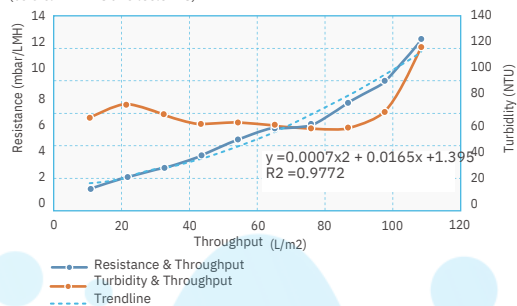
Filter Media	Cellulose, diatomite lter aid and ionic wet-strength resin
Process Type	P pharmaceutical C High dirt holding capacity with positive charge



Features of Flow rate



Schematic diagram of E. coli crushing solution ltration
(before:1122NTU after:65.6NTU)



Operating Conditions

	Roheap CSD Filter	CDF Capsule Filter
Max Temperature	80°C	40°C
Max Differential Pressure	0.24 MPa /80°C	0.3 MPa /40°C
Flush	Single Layer: 50L/m², Double Layer:100L/m², flow rate 10L/min/m²	

Filter Types

Round/Square Filter Sheets

Roheap CSD Filter

CDFC Capsule Filter

Large Scale Clarification Capsule Filter

(used with stainless steel holder)

Flush

Endotoxins	<0.25 EU/ml
Biological Compatibility	Meet the requirement of USP<87> in Vitro Cytotoxicity Test. Meet the criteria of the USP <88> Biological Reactivity Test for Class VI-121°C plastics

Chemical Compatibility

Solvent	Concentration	@20°C	@80°C
NaOH	2%	G	P
HCl	5%	G	P
HNO3	5%	G	P
H2SO4	10%	G	P
Acetic Acid	38%	G	G
Citric Acid	10%	G	G
Acetic Peracid	0.1%	G	G
Butanol	80%	G	G
Ethanol	80%	G	G

G=Compatible; P=Incompatible

Extractable Metal Ions

PC	Ions ppb	Ions ppb
	Mg 5.201	Ni 0.334
	Al 34.540	Cu 0.770
	Ca 63.447	As 0.532
	Cr 0.047	Pb 0.04
	Fe 27.287	





Roheap Depth Part Number Configurator

Capsule Filter Example : CDFCSCSD0004PBP

Cobetter Claricap Lab Single-Layer Depth Capsule Filters



Filter Format

L05SS Claricap L05 (207cm²)
L10SS Claricap L10 (414cm²)
L03TT Claricap L03 (225cm²)
L05TT Claricap L05 (405cm²)
L08TT Claricap L08 (585cm²)



Filter Media

CSD Roheap CSD depth filter media



Number of Layers

S Single-Layer



Removal Ratings

0004 0.04-0.2µm
0020 0.2-0.4µm
0040 0.4-0.6µm
0060 0.6-0.8µm
0100 0.8-1.5µm
0150 1.5-3.0µm
0300 3.0-6.0µm
0400 4.0-9.0µm
0500 5.0-12.0µm
0600 6.0-15.0µm
0700 7.0-18.0µm
0800 8.0-20.0µm
0900 9.0-30.0µm
H003 0.02-0.2µm
H004 0.04-0.2µm



Type

PC Positive Charge
PE Negative Charge



P Pharmaceutical



Cobetter Claricap Lab Double-Layer Depth Capsule Filters



Filter Format

L05SS Claricap L05 (115cm²)
L10SS Claricap L10 (230cm²)
L03TT Claricap L03 (90cm²)
L05TT Claricap L05 (180cm²)
L08TT Claricap L08 (270cm²)



Filter Media

CSD Roheap CSD depth filter media



Number of Layers

D Double-Layer



Removal Ratings

01 0.04-0.2µm
02 0.2-0.4µm
04 0.4-0.6µm
06 0.6-0.8µm
10 0.8-1.5µm
15 1.5-3.0µm
30 3.0-6.0µm
40 4.0-9.0µm
42 6.0-12.0µm
50 5.0-12.0µm
60 6.0-15.0µm
70 7.0-18.0µm
72 7.0-30.0µm
80 8.0-20.0µm
H0 0.02-0.2µm
HP 0.02-0.2µm
H2 0.01-0.2µm
S8 0.1-0.2µm



Type

PC Positive Charge
PE Negative Charge



P Pharmaceutical



Cobetter Claricap D Single-Layer Depth Capsule Filters



Filter Format

CDFC	Claricap	Lab	(23cm2)
CSCA	Claricap	D08	(0.2m2)
CSCB	Claricap	D16	(1.15m2)
CSCC	Claricap	D08 Pro	(0.4m2)
CSCD	Claricap	D08 - II	(0.2m2)
CSCF	Claricap	D08 Pro - II	(0.5m2)



Number of Layers

- Single-Layer



CSD For CDFC Series



Removal Ratings

0004	0.04-0.2μm
0020	0.2-0.4μm
0040	0.4-0.6μm
0060	0.6-0.8μm
0100	0.8-1.5μm
0150	1.5-3.0μm
0300	3.0-6.0μm
0400	4.0-9.0μm
0500	5.0-12.0μm
0600	6.0-15.0μm
0700	7.0-18.0μm
0800	8.0-20.0μm
0900	9.0-30.0μm
H003	0.02-0.2μm
H004	0.04-0.2μm



Type

PC Positive Charge
PF Negative Charge



P Pharmaceutical



Cobetter Claricap D Double-Layer Depth Filter Cassette



Filter Format

CDFC	Claricap	Lab	(23cm2)
CSCA	Claricap	D08	(0.15m2)
CSCB	Claricap	D16	(0.92m2)
CSCC	Claricap	D08 Pro	(0.4m2)
CSCD	Claricap	D08 - II	(0.15m2)
CSCE	Claricap	D08 Pro - II	
CSCM	Claricap	M11	(1.1m2)



Number of Layers

D Double-Layer



CSD For CDFC Series



Removal Ratings

01	0.04-0.2μm
02	0.2-0.4μm
04	0.4-0.6μm
06	0.6-0.8μm
10	0.8-1.5μm
15	1.5-3.0μm
30	3.0-6.0μm
40	4.0-9.0μm
42	6.0-12.0μm
50	5.0-12.0μm
60	6.0-15.0μm
70	7.0-18.0μm
72	7.0-30.0μm
80	8.0-20.0μm
H0	0.02-0.2μm
HP	0.02-0.2μm
H2	0.01-0.2μm
S8	0.1-0.2μm



Type

PC Positive Charge
PF Negative Charge



P Pharmaceutical





CSD Depth Cartridge Filter

C S D
Filter Format

☐ ☐ ☐ ☐
Removal Ratings

☐ ☐
Type

☐ ☐ ☐
End Cap

☐ ☐
Diameter

☐
Number of Cells

☐
O-ring Material

P
Pharmaceutical

CSD



0004 0.04-0.2µm
0020 0.2-0.4µm
0040 0.4-0.6µm
0060 0.6-0.8µm
0100 0.8-1.5µm
0150 1.5-3.0µm
0300 3.0-6.0µm
0400 4.0-9.0µm
0500 5.0-12.0µm
0600 6.0-15.0µm
0700 7.0-18.0µm
0800 8.0-20.0µm
0900 9.0-30.0µm
RELP 0.5-0.8µm
H003 0.02-0.2µm
H004 0.04-0.2µm

PC Positive Charge
PE Negative Charge

DOE
TCT

12 12inch
16 16inch

W2 Cells
Y3 Cells
G4 Cells
B5 Cells
H8 Cells
N9 Cells
X 10Cells
Q 11Cells
T 12Cells
E 14Cells
F 15Cells
D 16Cells

S Silicone
E EPDM
V Fluoroelastomer
T FEP/PFA encap-sulated O-rings
P Pharmaceutical

CSD Depth Cartridge Filter

C S D
Filter Format

- II
Number of Layers

☐ ☐ ☐ ☐
Removal Ratings

☐ ☐
Type

☐ ☐ ☐
End Cap

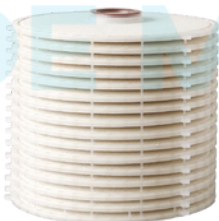
☐ ☐
Diameter

☐
Number of Cells

☐
O-ring Material

P
Pharmaceutical

CSD



- II Double-Layer

01 0.04-0.2µm
02 0.2-0.4µm
04 0.4-0.6µm
06 0.6-0.8µm
10 0.8-1.5µm
15 1.5-3.0µm
30 3.0-6.0µm
40 4.0-9.0µm
42 6.0-12.0µm
50 5.0-12.0µm
60 6.0-15.0µm
70 7.0-18.0µm
72 7.0-30.0µm
80 8.0-20.0µm
H0 0.02-0.2µm
HP 0.02-0.2µm
H2 0.01-0.2µm
S8 0.1-0.2µm

PC Positive Charge
PE Negative Charge

DOE
TCT

12 12inch
16 16inch

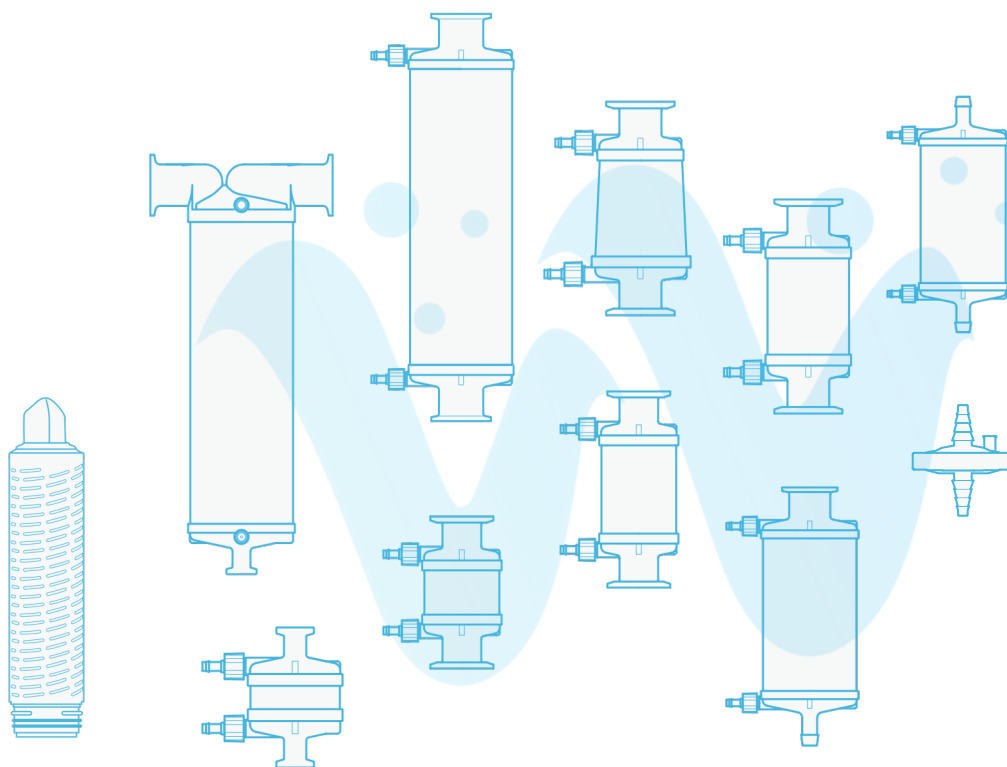
A 1 Cell
W 2 Cell
Y 3 s
G 4 Cell
B 5 s
H 8 Cell
N 9 s
X 10 Cells
s
Cell
s
Cell
s

S Silicone
E EPDM
V Fluoroelastomer
T FEP/PFA encap-sulated O-rings
P Pharmaceutical



Our Mission

Committed to providing excellent products and continuous innovative solutions, we help customers optimise their process and improve product quality.



LABOR WASSER DE MÉXICO S.A. DE C.V.

cobetter[®]
— filtration —



Filtration Area

	Specification	Single Layer	Double Layers
	CDFC	23cm ²	23cm ²
	L05SS	207cm ²	115cm ²
	L10SS	414cm ²	230cm ²
	L03TT	225cm ²	90cm ²
	L05TT	405cm ²	180cm ²
	L08TT	585cm ²	270cm ²
	CSCA	0.2m ²	0.15m ²
	CSCC	0.4m ²	0.4m ²
	CSCE	0.5m ²	0.4m ²
	CSCD	0.2m ²	0.15m ²
	CSCB	1.15m ²	0.92m ²
	CSCM	/	1.1m ²
	CSD12"Per Layer CSD16"Per Layer	0.11m ² /0.23m ²	0.11m ² /0.23m ²