cobetter®
filtration

Depth Filtration

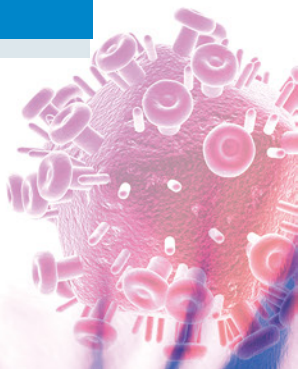
Claricap CSD & Roheap CSD

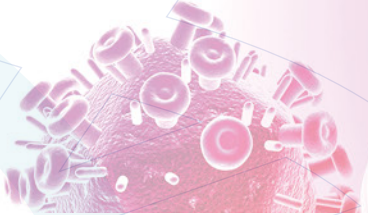














Claricap CSD & Roheap CSD
Depth Filtration Series

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 llines. All raw materials are tested by a strict quality control process to ensure filter quality and good performance in any application.

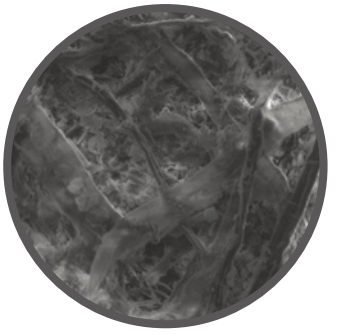


Excellent Retention Efficiency

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.

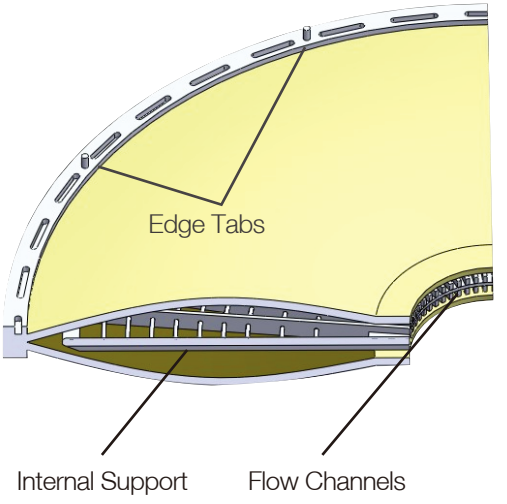
Diatomaceous earth-as an inorganic filter aid,its natural porous structure provides a good particle adsorption effect and increases the permeability of paperboard.

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, reduceing 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

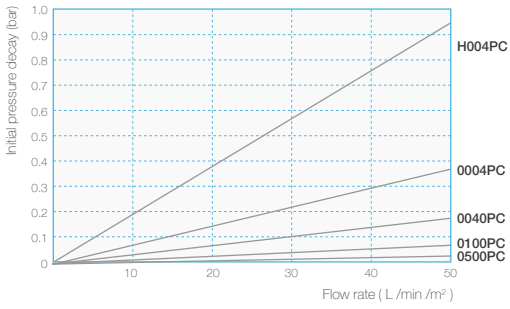
- Fermentation broth and cell culture media clarification filtration
- Serum and blood products filtration
- Enzyme preparation filtration
- Particle removal filtration
- Colloidal and viscous materials filtration

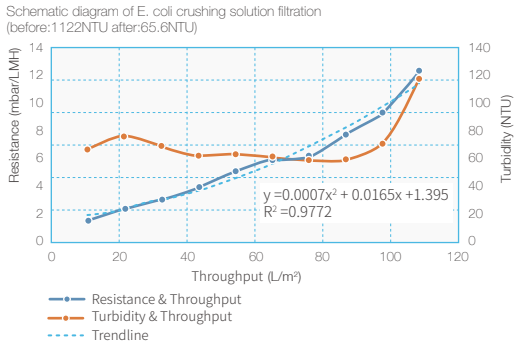
Material of Construction

Filter Media	Cellulose, diatomite filter aid and ionic wet-strength resin
Process Type	PE Negative Charge, PC Positive Charge



Features of Flow rate





Filter Types

Roheap CSD Filter

CDFC Capsule Filter

Large Scale Clarification Capsule Filter
(used with stainless steel holder)

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	

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
HNO_3	5%	G	P
H_2SO_4	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		Number of Layers				Removal Ratings		Type			
				C	S	D					P
CDFC	Claricap Lab (23cm^2)	**S**	Single-Layer	**CSD**	For CDFC Series	**0004**	0.04-0.2μm	**PC**	Positive Charge	**P**	Pharmaceutical
CSCA	Claricap D08 (0.2m^2)					**0020**	0.2-0.4μm	**PE**	Negative Charge		
CSCB	Claricap D16 (1.15m^2)					**0040**	0.4-0.6μm				
CSCC	Claricap D08 Pro (0.4m^2)					**0060**	0.6-0.8μm				
CSCD	Claricap D08 - II (0.2m^2)					**0100**	0.8-1.5μm				
CSCE	Claricap D08 Pro - II (0.5m^2)					**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				



Cobetter Claricap D Double-Layer Depth Filter Cassette

Filter Format		Number of Layers				Removal Ratings		Type			
				C	S	D					P
CDFC	Claricap Lab (23cm^2)	**D**	Double-Layer	**CSD**	For CDFC Series	**01**	0.04-0.2μm	**PC**	Positive Charge	**P**	Pharmaceutical
CSCA	Claricap D08 (0.15m^2)					**02**	0.2-0.4μm	**PE**	Negative Charge		
CSCB	Claricap D16 (0.92m^2)					**04**	0.4-0.6μm				
CSCC	Claricap D08 Pro (0.4m^2)					**06**	0.6-0.8μm				
CSCD	Claricap D08 - II (0.15m^2)					**10**	0.8-1.5μm				
CSCE	Claricap D08 Pro - II (0.4m^2)					**15**	1.5-3.0μm				
CSCM	Claricap M11 (1.1m^2)					**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				

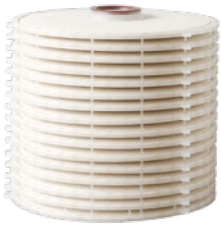


CSD Depth Cartridge Filter

C S D	□□□□	□□	□□□	□□	□	□	P
Filter Format	Removal Ratings	Type	End Cap	Diameter	Number of Cells	O-ring Material	

Filter Format

CSD



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
RELP	0.5-0.8μm
H003	0.02-0.2μm
H004	0.04-0.2μm

Type

PC	Positive Charge
PE	Negative Charge

End Cap

DOE	
TCT	

Diameter

12	12inch
16	16inch

Number of Cells

W	2 Cells
Y	3 Cells
G	4 Cells
B	5 Cells
H	8 Cells
N	9 Cells
X	10Cells
Q	11Cells
T	12Cells
E	14Cells
F	15Cells
D	16Cells

O-ring Material

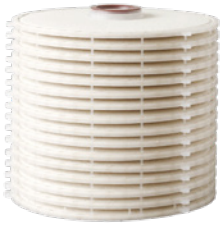
S	Silicone
E	EPDM
V	Fluoroelastomer
T	FEP/PFA encap-sulated O-rings
P	Pharmaceutical

CSD Depth Cartridge Filter

C S D	-	II	□□	□□	□□	□□□	□□	□	□	P
Filter Format		Number of Layers	Removal Ratings		Type	End Cap	Diameter	Number of Cells	O-ring Material	

Filter Format

CSD



Number of Layers

-	**II**	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

End Cap

DOE	
TCT	

Diameter

12	12inch
16	16inch

Number of Cells

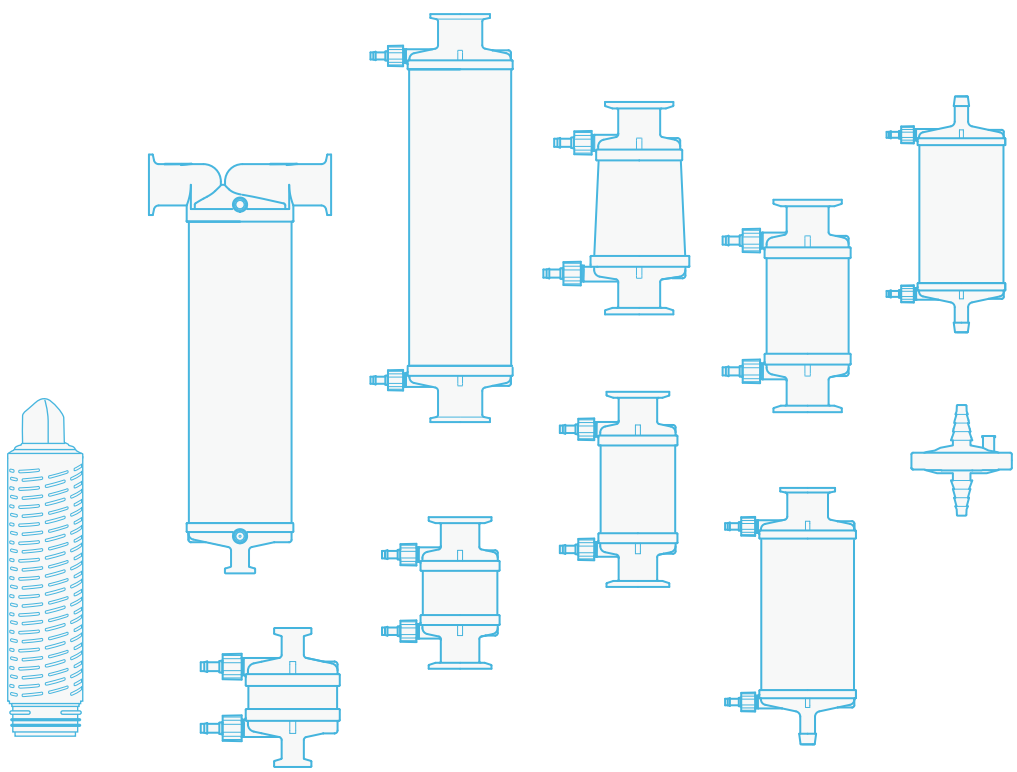
A	1 Cell
W	2 Cells
Y	3 Cells
G	4 Cells
B	5 Cells
H	8 Cells
N	9 Cells
X	10Cells

O-ring Material

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.



cobetter®
filtration

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Specifications subject to change without notice.

Filtration Area

	Specification	Single Layer	Double Layers
	**CDFC**	23cm²	23cm²
	**L05SS**	207cm²	115cm²
	L10SS	414cm²	230cm²
	**L03TT**	225cm²	90cm²
	L05TT	405cm²	180cm²
	L08TT	585cm²	270cm²
	**CSCA**	0.2m²	0.15m²
	**CSCC**	0.4m²	0.4m²
	**CSCE**	0.5m²	0.4m²
	**CSCD**	0.2m²	0.15m²
	**CSCB**	1.15m²	0.92m²
	**CSCM**	/	1.1m²
	**CSD12”Per Layer** **CSD16”Per Layer**	0.11m²/0.23m²	0.11m²/0.23m²