

# Sinterflo® CRC

Sintered 316/316L SS colour remediation chromatography (CRC) disc assemblies used in edible oil extraction



**Sinterflo® CRC** multi layered, diffusion-bonded stainless-steel meshes are available in 316/316L and other alloys. This precision filter mesh, also known as a porous plate, is available in a range of different pore sizes ranging from 1 - 100 microns in various diameters.

These multi-layers precision filter meshes are produced using a novel sintering process resulting in superior mechanically strong structures. Primarily made from 316/316L stainless steel.

### Colour Remediation Chromatography (CRC) and Super Critical Fluid Chromatography (SFC)

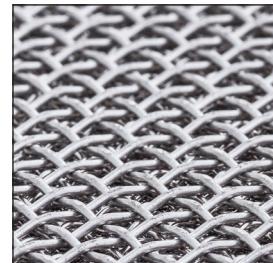
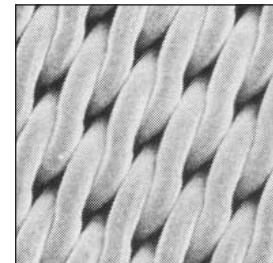
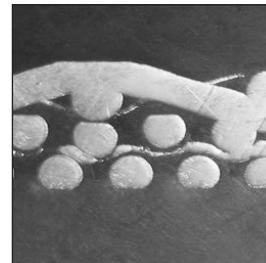
This final filtration method occurs after solvent and supercritical extraction or winterization and before distillation of the extracted oil. Filter aids such as activated magnesium silicate, PVPP, clay, silica gel and carbon are packed into a column. The extracted oil is then pulled through the column using vacuum and/or pressure assist. The purpose of this process is to strip away undesirable plant material, pigments, fats, and chlorophyll.

**Sinterflo® CRC discs** can be used as a robust solution in high pressure chromatography columns for retaining fine particles used in filter aids and prevent harmful particle pass through resulting a pure extract, free from any contamination.

### Features and Benefits

- High permeability**  
Custom designed for shorter batch times, lower delta P and longer filter life. Outperforms competition by 75%.
- Abrasion Resistance**  
Unlike filter papers Sinterflo® CRC will not introduce any downstream contaminates, highly resistant to mechanical abrasion.
- Uniform pore structure**  
Highly selectable for precise media retention.
- Extremely Robust**  
Self-supporting and will perform under very high pressures.
- Cleanability**  
Sustainable solution easily backwashed or chemically cleaned for multiple uses.
- Custom sizes and engineered solutions available.
- Made in the USA.**

Typical cross section of Sinterflo® CRC media configuration.



## Specifications

### Materials of Manufacture

316/316L stainless steel standard. 304L stainless steel, Inconel®, Hastelloy® and Monel® available on request or by process selection.

### Dimensions (Nominal)

Standard sizes range from 4 - 12" D x 0.083" H in the form of a complete assembly with fully welded hardware.

Custom diameters, shapes, welded cones and welded cylinders, pleated cartridges, and the materials can be manufactured in a variety of layer combinations depending on your specific requirements.

### Maximum Differential Pressure

300 PSIG

Custom filters available for high pressure applications. Contact Sales Team for further information.

### Operating Temperature

Maximum continuous:

up to 644°F (340°C)

up to 1832°F (1000°C) alloy limiting

## Sinterflo® CRC Ordering Information

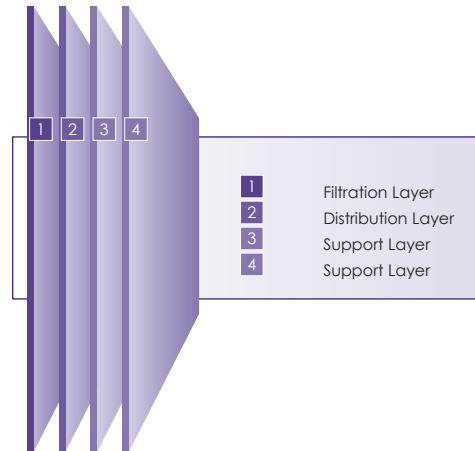
To form a part code, select from the table below:

Product Code: Sinterflo® CRC- 1 - 2

Table 1: Micron Grade Code / $\mu\text{m}$		Table 2 : Diameter Code / diameter	
001	1 $\mu\text{m}$	03	3"
002	2 $\mu\text{m}$	04	4"
005	5 $\mu\text{m}$	06	6"
010	10 $\mu\text{m}$	08	8"
020	20 $\mu\text{m}$	10	10"
		12	12"

Larger pore sizes and diameters available upon request, contact the Sales Team for further information.

## Sinterflo® CRC Filter Plate Configuration



## Colour Remediation Chromatography (CRC) Process Diagram

